

## **Historic, Archive Document**

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# SEEDS

PLANTS BULBS  
ROSES TREES AND  
GARDEN SUPPLIES

HIGHEST  QUALITY

1919  
*Catalog*



**Routledge**  
**SEED & FLORAL CO.**

145 147 2nd St. PORTLAND ORE.



# READ ALL ON THIS PAGE CAREFULLY

## What WE Do and What YOU Should Do

### FORWARDING CHARGES BY PARCEL POST, EXPRESS OR FREIGHT

#### By Mail or Parcel Post

The following rules apply to the states west of the Rocky Mountains, i. e., OREGON, WASHINGTON, CALIFORNIA, IDAHO and MONTANA:

**OTHER STATES.**—Customers ordering from other states must add postage (see rate table, page 2), if wanted by mail, otherwise shipment will be made by express or freight, transportation charges collect.

On Cash Orders we will at prices printed in this catalog send by prepaid parcel post all **Seeds** in packets, ounces, or single pounds.

**Small Plants** (not potted), **Bulbs**, **Roots** and 1-year-old **Roses** are prepaid unless otherwise stated.

**SEEDS IN BULK.**—When you order Seeds in quantity above 1 lb., add postage. (See parcel post rates, page 2.)

**TOOLS, SUPPLIES, FOODS, REMEDIES, ETC.**—On this class of goods we have marked the parcel post weight, including

packing (PP Wgt), so that you can add postage to catalog prices if you want them by parcel post.

**HARDY FLOWERING SHRUBS, SMALL FRUIT, BERRY and ORNAMENTAL SHRUBS and PLANTS, CLIMBING VINES and 2-YEAR-OLD ROSE BUSHES** can be sent by parcel post if necessary, but be sure you send extra money for packing and postage. Postage and packing charges will be specified on the different pages unless the prices are postpaid.

**NOT MAILABLE.**—Plants in pots, large, branching shrubs, Evergreens of all kinds, that must be balled in earth, Fruit and Shade Trees, over 1 year old and taller than 3 feet cannot be sent by Parcel Post. Neither can Insecticides that are poisonous, flower pots, jardinieres, bird cages, or liquids in larger than 1-pint cans.

#### By Freight or Express

We **DO NOT** at catalog prices pay freight or express charges on any stock we offer, unless so stated; therefore, take note of the following paragraph:

**PREPAY STATIONS.**—When you send in orders to go by freight or express be sure you send extra money to pay the transportation charges if your station is a prepay point, which is always the case where there is no regular agent. If you send more than enough, we will refund it as soon as we get the prepay bill. If not enough, we will write for the balance and expect you to remit promptly.

**SEASONABLE STOCKS.**—Many customers order plants and bulbs out of season—that is, before we get stocks in or perhaps too late in the spring. Rather than delay the balance of your order, we will send what is seasonable at once and defer the balance until proper planting season unless otherwise instructed.

**REPORTS—GOOD OR BAD.**—Will you help us to attain greater success by writing and telling us how our Seeds and Supplies reach you, how they grow and how you like them? We will certainly appreciate it. Your criticisms, if you have any, as well as your praises, are desired.

**MISTAKES.**—These will happen occasionally, in spite of all care. Write us at once, with copy of original order, if possible, and mistakes will be promptly rectified.

**LARGE ORDERS.**—Any gardener, institution or individual wishing seeds, plants, trees or supplies in large quantities is requested to mail a list of what is wanted, stating grade, size or amount, and we will promptly return it with our very lowest prices. A letter of inquiry may save you dollars if you want to buy in **QUANTITY**, or some **PARTICULAR STOCKS**.

**ORDER EARLY.**—We aim to execute all orders as soon as received, but during the rush season in April and May delays are unavoidable, which, however, can be partly overcome by our patrons anticipating their wants and ordering and taking delivery of their requirements early.

**CASH WITH ORDER.**—Please send money with the order sufficient to cover the whole bill. We decline sending goods "Collect on Delivery," unless remittance be made on account to guarantee acceptance.

**CORRESPONDENCE.**—We try to give prompt attention to all proper letters of inquiry, etc., but ask, as a favor, that all questions be stated clearly and briefly, and not on order sheets.

**NOTE.**—We use every precaution in procuring fresh, pure and reliable seeds, etc., but we, in common with other responsible seed houses, sell our goods subject to the following disclaimer, it being that adopted by the American Seed Trade Association, i. e.: We give no warranty, express or implied, as to description, quality, productiveness or any other matter of any seeds, bulbs, nursery stock, roots or plants sent out and will not be in any way responsible for the crop. If the purchaser does not accept the goods on these terms they are to be returned at once.

ROUTLEDGE SEED & FLORAL CO.

Sheet

**145 147 2<sup>nd</sup> St. PORTLAND ORE.**

Rate 1920 - 1

In filling this order we will use the greatest care to have it true to name, and will replace any that may prove untrue. But no sale by us carries a warranty of quality, express or implied, and for any error we shall not be liable for more than the purchase price. Every purchase from us is made on these terms.

ROUTLEDGE SEED & FLORAL CO.

DO NOT USE  
THESE SPACES

NAME \_\_\_\_\_

No. \_\_\_\_\_

POST OFFICE \_\_\_\_\_ R. F. D. NO. \_\_\_\_\_

Amt. \_\_\_\_\_

STATION \_\_\_\_\_  
(If different from P. O.) \_\_\_\_\_

Re \_\_\_\_\_

COUNTY \_\_\_\_\_ STATE \_\_\_\_\_

Ack. \_\_\_\_\_

DATE \_\_\_\_\_ AMOUNT ENCLOSED, \$ \_\_\_\_\_

O. K. by \_\_\_\_\_

FORWARD BY \_\_\_\_\_  
State if wanted by Mail, Express, Freight or Steamer.  
(Read Note on bottom of this page.)

Card Made \_\_\_\_\_

[illegible]

**NOTE.**—Before you send this order read carefully what we have to say about parcel post and transportation charges on inside front cover and on page 2.





# The Four Routledge Brothers

Learn to know them by their given names to save confusion



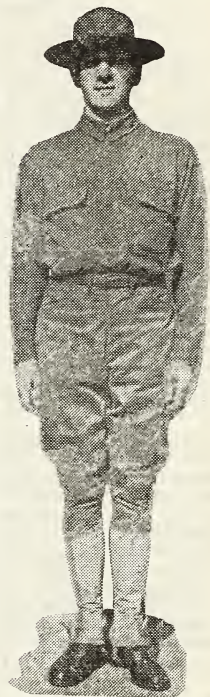
**RALPH R.**  
Pres.-Gen'l Mgr.



**J. IRA**  
Sec.-Treas.



**GEORGE L.**  
Mgr. Pet Stock Dept.



**C. H.—"DUKE"**  
Vice-President  
At present Sergeant  
U. S. Army in France

Portland, Ore., Jan. 1st, 1919.

## Greetings to Our Customers and Friends

On this New Year's day we extend to all the "season's greetings." May your fondest wishes come true and may you prosper and be successful.

The "war is over" and "the boys" are coming home. To those who lost a loved one we extend our deepest sympathy. Our "Duke"—C. H. Routledge—is still in France, but we hope to have him with us before the season is over.

America must help feed and supply the starving nations of Europe, so let us all keep busy and put in another year of extensive work. Raise all the fruit, vegetables, grain and meat possible.

Some seeds and supplies are higher this year; others lower. We have used great care in the selection of the stocks offered and assure you of the same "high quality" and efficient service as heretofore.

"Our Motto": Quality First, then price as low as we can make.

We thank you for past orders and hope to serve you again. Yours for a greater development of the Northwest.

## Routledge Seed & Floral Co.

Store, 145-147 Second St., between Morrison and Alder.

## U. S. PARCEL POST RATES AND REGULATIONS

**BY PARCEL POST**—We do not have agents or traveling salesmen, but do a direct mail order business with our customers. This enables us to give you direct and personal attention, quick service and lower prices.

### Size and Weight of Parcel Post Packages

Packages cannot be sent that measure over 84 inches in length and girth combined. The weight limit for the local, first, second and third zones is 70 pounds. The weight limit for the third to eighth zones is 50 lbs., except as follows:

**ALASKA, MEXICO, CUBA, HAWAII, PANAMA** and the **PHILIPPINES** take the 8th zone rate with a **WEIGHT LIMIT OF 20 LBS.**

**CANADA** takes the **EIGHTH** zone rate with a **WEIGHT LIMIT OF 4 LBS. 6 OZS.**

### Zones

First and second zone..	50 to 150 miles, first lb.	5c; each additional lb. or fraction	1c
Third zone.....	150 to 300 miles, first lb.	6c; each additional lb. or fraction	2c
Fourth zone.....	300 to 600 miles, first lb.	7c; each additional lb. or fraction	4c
Fifth zone.....	600 to 1000 miles, first lb.	8c; each additional lb. or fraction	6c
Sixth zone.....	1000 to 1400 miles, first lb.	9c; each additional lb. or fraction	8c
Seventh zone.....	1400 to 1800 miles, first lb.	11c; each additional lb. or fraction	10c
Eighth zone.....	all over 1800 miles, first lb.	12c; each additional lb. or fraction	12c

### Postage Rates

**War Tax.**—Don't forget to add the war tax of 1c extra for each 25c or fraction thereof.

When you order from Portland, look for the zone that corresponds to the number of miles you are away, add up total weight of your order, consult the table above and add postage.

**ALL MISCELLANEOUS MERCHANDISE** offered in this catalog **THAT CAN BE SENT BY PARCEL POST** is marked **P. P.** and the **PACKED WEIGHT** is given so that extra money for **POSTAGE** can be remitted according to the table above, **OTHERWISE** we will send by freight or express **AT YOUR EXPENSE.**

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## ARTICHOKE

**LARGE GREEN GLOBE.**—The well-known French vegetable; the undeveloped flower heads, when properly prepared, make a most delicious dish. Pkt. 15c; oz. \$1.25

**White Jerusalem.**—Tubers grown for stock. See page 44.

## ASPARAGUS

**COLUMBIAN MAMMOTH WHITE.**—Gives immense yield of large, clear, white shoots; very tender and of excellent flavor.

Pkt. 5c; oz. 15c; 4 oz. 35c; 1b. \$1.00  
**PALMETTO.**—Early, prolific; large, thick, dark-green shoots. Popular commercial variety. Pkt. 5c; oz. 15c; 4 oz. 35c; 1b. \$1.00

**CONOVER'S COLOSSAL.**—A good, standard large sort of approved quality. Shoots bright green, very tender.

Pkt. 5c; oz. 15c; 4 oz. 35c; 1b. \$1.00

### ASPARAGUS ROOTS

You can save two years' time by buying Asparagus Roots. For prices, see Vegetable Roots, page 117.



Asparagus Tips

## GARDEN BEANS

### Dwarf or Bush—Green Podded Kinds

~~~~~  
 Packet and single pound prices only are prepaid. Add postage to 10 lb. prices if wanted by mail.  
 ~~~~~

#### Stringless Green-Pod

The most popular and best liked green snap bean.

This famous bean is unequaled as a first-early; also for main crop.

It combines unusual hardness, extreme earliness, and wonderful productiveness with handsome appearance and finest quality of pods. Extra early plantings may be made to produce the earliest crop, and even with later plantings this bean is the quickest to produce pods.

By repeated plantings pods may be had in constant succession from spring until cut off by heavy frosts in the fall. Combined with the extra hardness and early maturity, the pods are the finest in quality, of a rich green, very round and almost straight, long, solidly meaty and plump,—deeply saddle-backed, caused by the rounded swell of the fleshy sides. The pods are tender, brittle, and of finest flavor, always entirely stringless even when fully matured.

Large pkt. 15c; 1b. 35c; 10 lbs. \$3.00



Stringless Green-Pod.

**DWARF HORTICULTURAL.**—One of the best dwarf sorts for green shell beans for the home garden and market and can be used early as a garden podded snap bean. The plants are very productive, compact and upright, with large leaves. The mature pods are about five to five and one-half inches in length, broad and thick, curved, with splashes of bright red on a yellowish ground. They become fit for use as green shelled beans early and in this condition the beans are very large, easily shelled and are about equal to the Lima in quality. Seed large, oval, plump, pale buff splashed with deep red. Excellent for canning.

Large pkt. 15c; 1b. 35c; 10 lbs. \$3.00

**EXTRA EARLY REFUGEE.**—Extremely early, very hardy and productive. Pods round and straight, tender and of excellent quality. In demand as a pickling and canning variety.

Large pkt. 15c; 1b. 35c; 10 lbs. \$3.00

Market and Truck Gardeners should write us for special prices and state quality and kinds wanted. We'll save you money and you will get "Highest Quality" Seeds.



INOCULATE THIS  
SEED WITH  
MULFORD CULTURE

## BEANS—Continued

INOCULATE THIS  
SEED WITH  
MULFORD CULTURE

### Dwarf or Bush—Yellow Podded

Packet and single pound prices are prepaid. Add postage to 10 lbs. prices if wanted by mail.

#### Prolific Black Wax

The earliest wax variety. Pods a rich, creamy yellow, round, fleshy, tender, stringless and remain in fit condition for some time. Enormously productive and of fine quality, and one of the most reliable sorts for general use.

Large pkt. 15c; lb. 35c; 10 lbs. \$3.00

#### Improved Golden Wax

Medium early, heavy cropper, vine vigorous. May be sown early or late with the assurance of a good crop. Pods are golden yellow, fleshy and solid, brittle, waxy texture and have an exceptionally rich buttery flavor. Excellent for home or market garden.

Large pkt. 15c; lb. 40c; 10 lbs. \$3.25



Prolific Black Wax

Merrill, Oregon, May 14, 1918.

Routledge Seed & Floral Co.,

Dear Sirs: I will say that the quality of your stock has been very satisfactory. Will say your prices and stock please me better than any Western house.

MRS. F. J. GLENN.

### Davis Kidney Wax (See Cut)

The most hardy and productive wax bean. The pods are long, white, straight, crisp and tender. The vine is rustless and very vigorous, bearing the pods in clusters. For canning this is unexcelled on account of purity of the pod and bean. It is a remarkably good variety for shipping; seed white, and on this account is desirable for a shelled bean in winter. Large pkt. 15c; lb. 35c; 10 lbs. \$3.25

### New Brittle Wax

Extremely early and of such superb quality it might almost be called "Best of All." The plants are of vigorous growth, with large foliage, and appear completely loaded with handsome pods, which are nearly straight and measure  $4\frac{1}{2}$  to 6 inches long. They are broad, fleshy, tender, "brittle" and entirely stringless at all stages of growth. The pods are unexcelled as snap-shorts. Seed white, showing only a small dark dot at the eye; any surplus allowed to ripen will be readily salable as winter shell beans. (Seed crop very short.)

Large pkt. 15c; lb. 40c; 10 lbs. \$3.25

### Wardwell's Kidney Wax

A popular and well-known variety; pods long, golden-yellow, brittle and stringless; seed white, with dark markings about the eye. Market gardeners find this bean one of the most profitable. (Seed crop very short.) Large pkt. 15c; lb. 35c; 10 lbs. \$3.25

Routledge Seed & Floral Co.,

Dear Sirs: Your seeds are fine. I could not garden without them.

Respectfully,

MRS. J. C. ACHESON.



Davis Wax



## DWARF BEANS—Continued

## French Green (Haricots Verts)

A new green-podded, light green seeded bush bean of great merit and highly prized by those who have tried it. A fairly good string bean when young, but it is a **most delicious** shelled bean, either green or dry. When a French cook sees this variety, he knows that he can prepare a most **delicately flavored dish**, attractive to the eye and **extremely palatable**. The dry bean is medium size, rather flat and light green in color, which is retained after cooking. **Very distinct**. A vigorous grower and extremely productive. In order to get the bean at its best and to retain the green color in the seed, the beans should be harvested while the pods still retain their green color and should be stacked in heaps to protect against the sunlight. Seed scarce, stock limited.

Large pkt. 20c; lb. 50c

## CLIMBING OR POLE BEANS

Packet and Single Pound **ONLY** are postpaid. Add postage if wanted in 10-lb. lots by mail.

## Routledge Perfection "White Seeded" Pole Bean

Our start of this meritorious new variety was obtained from a few seeds brought over from England. It produces large, quick growing vines which soon cover the poles, bearing a **very heavy crop** of handsome green pods about 8 inches in length which are very **meaty, stringless** and of **delicious flavor**. The vines produce their pods **very early** and continue to bear immense quantities of snap pods **throughout the season**. Excellent for canning. The dry beans being **white** and of good size when allowed to ripen on the vines, make it an excellent soup or bake bean for winter use. Stock limited.

Large pkt. 20c; 3 for 50c

## Improved Kentucky Wonder (Asparagus)

A very popular variety; often sold as asparagus. More extensively planted than any other. Pods green, very long, round and perfectly stringless. **Enormously productive** and early, **remaining in "fit" condition a long time**. Unsurpassed for the table, being very tender and of delicious flavor.

Large pkt. 15c; lb. 40c; 10 lbs. \$3.25

## Kentucky Wonder Wax

The best wax podded pole bean. Very similar to the green podded Kentucky Wonder but the pods are a little broader. They are very **fleshy** and **stringless** as snaps and are of **excellent quality**. The pods are very long, handsome light yellow. Seed medium sized, oval, flattened, very irregular, usually somewhat shriveled, dark brown. Its **earliness** and **hardiness** commend this as a pole bean well adapted for northern latitudes.

Large pkt. 15c; lb. 45c; 10 lbs. \$3.50

## Routledge Giant

A wonderful variety. Although the pods are often a foot long and an inch thick, the **flavor and quality** when cooked is **rich and excellent**. It is an **enormous yielder**, fine for "snaps" or canning. The giant pods are striped and mottled maroon, thick, tender, brittle and **really superb**. **Once planted always wanted**.

Large pkt. 20c; lb. 55c

## Harlequin—New

The finest pole horticultural variety in cultivation and on account of its **wonderful productiveness** and **superior quality** takes first rank as a late Shell Bean. The strain we offer is an especially fine one. Pods extra long, 6 to 7 inches, brilliantly colored with crimson carmine and are borne in clusters. Unequaled for tenderness and delicious flavor, either shelled or as snaps. Dry beans a little larger and a trifle longer than the old Horticultural Pole.

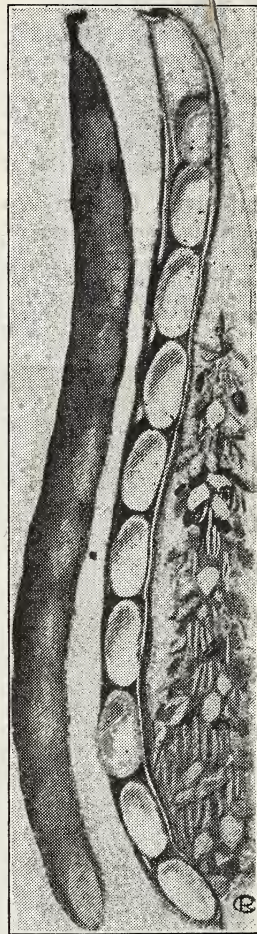
Large pkt. 20c; lb. 55c

**HORTICULTURAL POLE.—Speckled Cranberry or Wren's Egg.**—Vines vigorous, quite early. Pods short, broad, green, streaked with bright red. Beans are round, splashed and spotted with red. Of fine quality, either as a green Shelled Bean or dry for winter use.

Large pkt. 15c; lb. 35c; 10 lbs. \$3.00

**LAZY WIFE.**—One of the best of the later green podded pole beans for snap or green shell use. The medium green pods, borne in large clusters, are five to six inches long, broad, thick, fleshy and **entirely stringless**. When young they have a **rich, buttery flavor** which is retained until they are nearly ripe. The dry beans are excellent for winter use.

Although pole beans require a little more care and labor, they are, when properly grown, usually of longer bearing period than the dwarf sorts and are much more productive.



Kentucky Wonder.  
Asparagus.

The seed is white, medium size, slightly oval or nearly round.

Large pkt. 15c; lb. 45c; 10 lbs. \$3.85

**DUTCH CASE KNIFE.**—A moderate climber with long, flat, fleshy pods, which become creamy white as they mature; seed broad, flat and clear white. Good as a dry bean.

Pkt. 15c; lb. 35c; 10 lbs. \$3.00

**SCARLET RUNNER.**—Grown extensively for ornamental purposes, as flowers are a most brilliant scarlet and borne profusely; beans are broad and flat, and of fine flavor when cooked, same as Lima beans.

Large pkt. 15c; lb. 45c



## COMMERCIAL DRY TABLE BEANS

Beans will grow successfully on most any kind of soil, but they will do better and yield heavier on soil that is mellow, well drained and warm. Land that will produce good corn or wheat will grow good beans. Sandy river bottom is especially good.

**PLANT TRUE PURE SEED**—It certainly pays to secure a clean, true seed stock. Don't plant any common stock, even though it looks all right. You cannot tell by looking at it whether it is early or late, or acclimated.

The stocks we offer are of known varieties, acclimated and hand-picked and grown especially for seed—by far the safest, best and most profitable in the end, even though it costs a little more at planting time.

### Brown Swedish

Dry beans, rather small size, round, oblong, light golden brown with a white eye. As a cooking or baking bean the quality is very superior, having a **richness and flavor all its own**. Our customers who planted it last spring **praise it very highly**. They say on account of its excellent qualities, they prefer it for their own table use. **It is unusually productive**, pods long and straight and always well filled. Bush strong, healthy and vigorous. **Crop matures early.** Pkt. 10c; lb. 30c; 10 lbs. \$2.50

To insure the greatest success

INOCULATE THIS  
SEED WITH  
**MULFORD CULTURE**

See page 41.



### IMPROVED TREE BEAN

#### Early, Wonderfully Productive

Of all the varieties we have tested we believe this is the best and most profitable white field bean for Oregon from the reports we have had from those who have planted it. On account of its snowy whiteness and uniformly small size, it commands the highest price in all markets. The plants grow upright, have less foliage than most varieties and hold the pods well up from the ground, thus keeping the beans from getting dirty and discolored. The pods are very freely produced, are long and well-filled. The dry bean is small, white, plump and almost round. **Cooking and eating qualities are unsurpassed.** The whole crop will ripen early and evenly and you can get it safely harvested before the rainy season sets in. Our stock of this particular strain is rather limited, so order early.

We will appreciate reports from all who plant it.

Prices: Large pkt. 10c; lb. 30c; 10 lbs. \$2.25; 25 lbs. \$5.00.

### Lady Washington

A great improvement over the old "Navy," for Western Oregon and Washington growers, as it is much earlier, a trifle larger, and a very heavy yielder, especially adapted to western conditions. The pods all ripen together and early enough to harvest before winter rains. Bean pure white and of excellent quality. Growers report our stock very superior.

Large pkt. 10c; lb. 25c; 10 lbs. \$2.00  
Write for quantity prices.

### Broad Windsor

An English variety; large, broad, flat beans of delicious flavor; used as a shell bean. Good for hog pasture; very hardy and very productive.

Large pkt. 15c; lb. 25c; 10 lbs. \$2.00

### Improved Tree Beans

#### Boston Yellow Eye

A bean of merit. Try it. Almost every one who has lived in New England knows the Boston Yellow Eye Bean and prefer them to any other Bean for cooking, as they possess a **richness and flavor known to no other variety**. As a shell Bean they are delicious, and for cooking in a dry state they have no equal. The dry Bean is almost round, plump and of a beautiful light-brown with a yellow eye. We strongly recommend the planting of the Boston Yellow Eye. Once used, they are always wanted.

Large pkt. 15c; lb. 35c; 10 lbs. \$3.00

#### White Wonder

Many of our customers have asked for a green podded white bean that would answer for a "snap bean" as well as a white bean for winter use. White Wonder is the bean to plant for this purpose. The strong points in its favor are its exceptionally fine flavor, remarkable productivity, extreme hardness and splendid appearance. It is a string bean, but there are few if any beans that **cook more tender**. Pods large, round and straight. Seed pure white, of medium size and excellent quality, baked or boiled.

Large pkt. 10c; lb. 30c; 10 lbs. \$2.75

#### Red Mexican

An excellent dry bean for winter use. Used extensively for baking and Spanish dishes. We offer select, hand picked, Oregon grown, acclimated seed.

Large pkt. 10c; lb. 25c; 10 lbs. \$2.25

FOR LIMA BEANS SEE PAGE 8.

#### CASTOR BEAN

Used for medicinal purposes and by some claimed to keep moles away. Ornamental foliage, 4 ft.

Large pkt. 15c; lb. 45c

Write for low prices by the hundred lbs. For seed tables, quantity per acre, see inside back cover.



## BEANS—Continued



Routledge Early Prize Lima

### Pole Limas

Of all the pole beans, limas are considered to have the greatest economic value. The culture is the same as for other pole beans except that being more tender, the seed is usually planted one to two weeks later.

#### Routledge Early Prize Lima

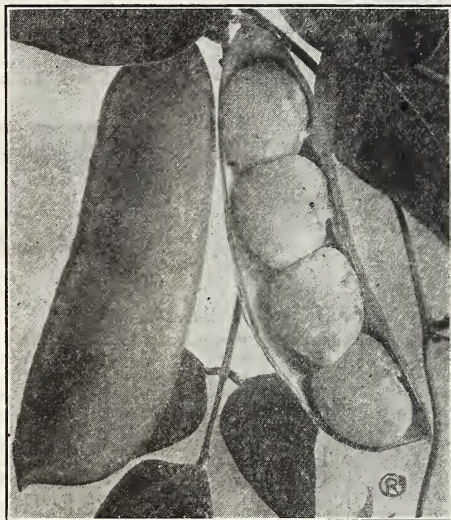
An imported variety procured at the same time as Routledge Perfection "snap" bean. By careful selection we now offer a strain **fully two weeks earlier than "Oregon."** It will actually mature a full crop of dry beans in the early fall. In earliness, ease of shelling, size, beauty and quality of the dry beans, this variety leads all other early limas for either the home garden or market. The vines are vigorous and remarkably productive. The extra long, large, flat, moderately curved pods are well filled. The green shell beans are very large, very tender and of finest quality. It has the **rich, buttery flavor, always desired but seldom found.** Gardeners will make no mistake in testing this new, extra early lima.

Large pkt. 20c; lb. 55c

#### Oregon Pole Lima

Excellent for the Northwest. Strong, vigorous grower. In July the blooms come in long panicles from the top shoots and the large, broad pods are freely produced until frost. The large, plump, white beans are of delicious quality, green, shelled or dry. They are in "prime condition" when the pods begin to turn yellow. Oregon grown, acclimated seed.

Large pkt. 15c; lb. 45c; 10 lbs. \$3.25



Burpee's Improved Bush Lima

### Dwarf or Bush Lima

**BURPEE'S IMPROVED BUSH LIMA.**—Best of the Bush Lima type. Very large, broad pods, excellent flavored beans, borne on large vigorous plants. Extremely prolific. Pods contain from four to six very large beans of greenish white color.

Pkt. 15c; lb. 35c; 10 lbs. \$3.00

**HENDERSON'S BUSH LIMA.**—Earlier than above. Very prolific; beans are small. Have a rich buttery flavor.

Large pkt. 15c; lb. 30c; 10 lbs. \$2.75

### BRUSSELS SPROUTS

The plants, which are very hardy, grow two or three feet high, and produce, from the sides of the stalks numerous little sprouts, which resemble very small cabbages one or two inches in diameter. The leaves should be broken down in the fall, to give the little heads more room to grow. They should be treated in all respects like winter cabbage or kale.

**PERFECTION OR DALKEITH.**—Plants are of dwarf growth and stems are thickly set with large, solid sprouts. This variety is very hardy and even during quite severe weather, the plants maintain their sprouts; in fact, the flavor and quality is much improved by frost. Pkt. 10c; oz. 35c; 4 oz. \$1.00



Brussels Sprouts

**CHIVES.**—See Vegetable Roots, page 37.



## TABLE BEETS

### Routledge Favorite

A select strain, very early. Perfectly globe shaped, with a single tap root, and of the richest color of any of the beets. It is a splendid keeper, is not excelled in yielding qualities by any other sort, is **exceedingly tender, fine and sweet and is unequalled for table use.** Market gardeners will find our Favorite a very profitable variety to grow, as no other sort approaches it in attractiveness or quality.

Pkt. 10c; oz. 20c; 4 oz. 50c; lb. \$1.75

### Crosby's Egyptian

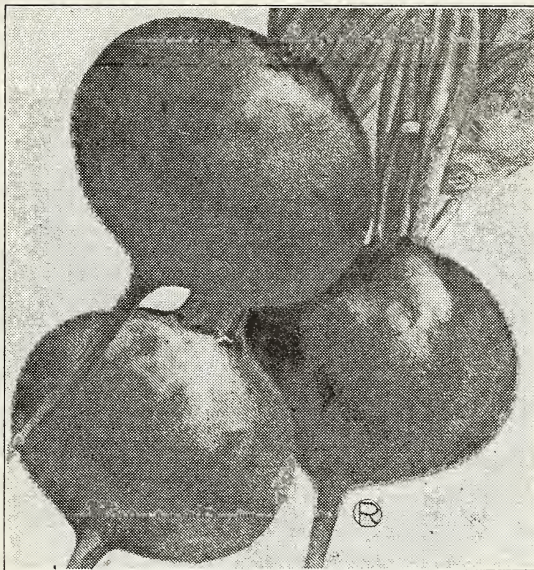
Very popular early beet, as it reaches the desired size quickly. The beets are of good size, rather flat than round, and flesh dark.

Pkt. 10c; oz. 15c; 4 oz. 45c; lb. \$1.35

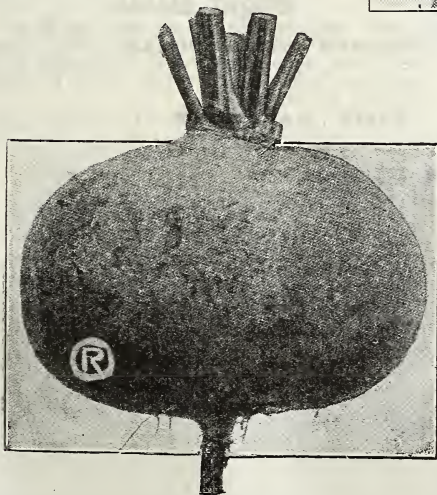
### Detroit Dark Red

Excellent variety, nearly globular, dark skin and dark flesh, zoned lighter; maturing early and keeping crisp and tender for a long time.

Pkt. 10c; oz. 15c; 4 oz. 50c; lb. \$1.50



Routledge Favorite.



### Improved Early Blood Turnip

This is the ideal beet for market gardeners. It is very symmetrical, with small tap root and but few fibrous roots; color outside is deep blood red; **fine grained and unsurpassed in quality.** It continues to grow until late in the fall, attaining a large size and making a good selling and eating beet for winter.

Pkt. 5c; oz. 15c; 4 oz. 45c; lb. \$1.35

**EDMAND'S BLOOD TURNIP.** — Unsurpassed for late planting; deep blood-red flesh, very tender and juicy, runs very evenly in size and quite round; grows a small top.

Pkt. 10c; oz. 15c; 4 oz. 50c; lb. \$1.75

### Improved Early Blood Turnip

**HALF LONG BLOOD.**—Becoming more and more popular. Excellent in shape and quality; yields well.

Pkt. 10c; oz. 15c; 4 oz. 50c; lb. \$1.50

**LONG BLOOD.**—The root is smooth and handsome, flesh brilliant in color and excellent quality. Good keeper.

Pkt. 5c; oz. 15c; 4 oz. 50c; lb. \$1.50

### Swiss Chard

**Luccullus "Spinach Beet."**

This does not make edible roots like the regular garden beets, but is grown for the broad white leaf-stalks, which are bunched and cooked in the same manner as asparagus. The young leaves may be gathered also and cooked like spinach. Makes a delicious summer vegetable.

Pkt. 10c; oz. 20c; 4 oz. 65c



Swiss Chard.

**OUR GARDEN CULTIVATORS** are priced very low and will save you much work in the garden. See pages 120 to 124.



## Stock Beets or Mangels

Excellent winter feed for horses, cattle, sheep, hogs and chickens. Farmers and stock raisers of the United States do not appreciate so fully the value of Mangels for feeding cattle, hogs, sheep, etc., as do the farmers of Europe. In France, Great Britain and other European countries, it is the exception rather than the rule where Mangels are not grown on a large scale on every farm. The immense yield which may be secured from an acre with very little expense either for material or labor, makes the Mangel crop one of the most profitable on the farm. 15 to 20 tons of roots an acre is not an unusual yield; some specimens weigh 20 to 30 lbs. each. Where properly cultivated, seeded and harvested the cost of growing a bushel should not exceed 10c. When fed in combination with grain they are worth almost as much, pound for pound, as the grain. This statement may seem absurd, but experience has proved that Mangels so aid digestion and assimilation, by keeping the animals in a healthy condition, that they increase the feeding value of other feeds consumed, beside the nutrients the roots contain. Every farmer ought to put in at least an acre of Mangels this coming season, 5 or 10 acres will be much better.

### GIANT YELLOW ECKENDORF

A new mangel of great merit. The roots are smooth, long and cylindrical in shape, very heavy, weighing up to 15 and 20 pounds each; grow two-thirds above ground. The flesh is firm, crisp and solid, white in color and of high feeding value. (See cut.)

Pkt. 5c; oz. 15c; 4 oz. 40c; lb. \$1.00

### Giant Half Sugar Mangel

Yields as much per acre as the best Mangels, and twice as much per acre (bulk of roots) as the rich sugar beet. Roots grow very large above the ground. Smooth, creamy white in color and very nutritious. Easily pulled. (See illustration No. 1.)

Pkt. 5c; oz. 15c; 4 oz. 40c; lb. \$1.00

### MAMMOTH LONG RED

Very popular and much used. A large and heavy cropper. Dark red skin, with whitish flesh; grows one-half or more above the ground; roots quite regular; attain a very large size. (Same shape as No. 2.)

Pkt. 5c; oz. 15c; 4 oz. 35c; lb. \$1.00

### DANISH SLUDSTRUP

An improved variety, considered one of the best. Awarded first class certificate. Color, reddish yellow, and of a distinct type. It is very hardy, grows well above ground; is easily pulled and very nutritious. (See cut.)

Pkt. 5c; oz. 15c; 4 oz. 40c; lb. \$1.00

### GOLDEN TANKARD

An enormous yielder of weight per acre, and at the same time very nutritious; flesh deep yellow, of fine shape, growing largely above ground, thus being easily harvested. (Same shape as cut No. 3.)

Pkt. 5c; oz. 15c; 4 oz. 40c; lb. \$1.00

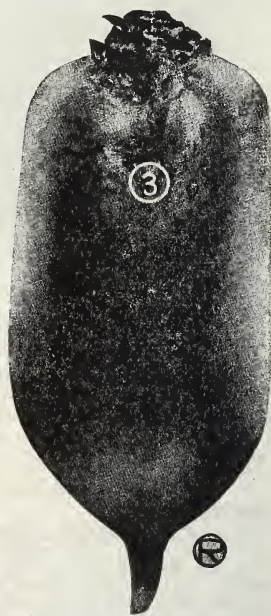
## Sugar Beets

Pkt. 10c; oz. 15c; 4 oz. 35c; lb. \$1.35

**FRENCH WHITE SUGAR.**—The sugar beet most generally grown for stock, as it combines, with heavy yield, from 10 to 13 per cent of sugar.

**KLEIN WANZLEBEN.**—The most popular for table and for sugar production. Tops rather large and slightly waved.

**NOTE.**—In 10-lb. lots, 10c per lb. less



(1) Giant Half Sugar.

(2) Danish Sludstrup.

(3) Giant Yellow Eckendorf.

Write for quantity prices. For amount of seed per acre, any kind, see "Seed Table," inside back cover.



## BROCCOLI—Winter Cauliflower

Forms a head like cauliflower, but is much hardier; stands wet and cold better and gives excellent results. For fall use sow from March to May; for winter and spring cutting, May to July. Very extensively planted by our local market gardeners for use in the late fall, winter and spring when cauliflower is out of season.

### St. Valentine

Well and favorably known and extensively planted by the large commercial growers. Produces large, solid, white heads. Season March to May. This strain of Oregon grown tested seed has given good satisfaction.

**Pkt. 10c; 1 oz. 35c; oz. \$1.00; 4 oz. \$3.50.**

### Routledge H. Q. St. Valentine

In this seed, we are offering our customers a very select, high-grade strain of the well-known St. Valentine. By selecting only the most perfect heads, those showing the most desirable leaf formation for the protection of the developing head and those of large size and perfect compact heads free from small center head leaflets, we have produced this superb strain. The last two years our **H. Q. St. Valentine** produced larger, later and far better heads than the best imported English seed, and it was so far superior to seed produced from other sources that there was no comparison. For instance—last February our grower reported that **H. Q.** stock was cutting 95 per cent of heads that brought him double the price of other ordinary stock.

Every ounce of our **H. Q. St. Valentine** seed we are offering this year is from just such perfect heads as shown herewith. Our seed of this particular lot is quite limited, so order early.

**H. Q.: Pkt. 15c; 1/4 oz. 50c; oz. \$1.50; 4 oz. \$4.50**



"H. Q." St. Valentine Broccoli



Front leaves broken down to show formation of growth.

### Sutton's Winter Mammoth

An English variety. Immense white heads, superb in texture and quality, coming into use in mid-winter. Vigorous in habit and self-protecting. (Imported seed.)

**Pkt. 10c; 1 oz. 40c; oz. \$1.25**

### Sutton's Late Queen

Quite distinct, dwarf and compact in growth, rarely affected by frost, and when planted late produces splendid heads the following spring in May. Has successfully passed through most severe winters. Heads well protected, large, handsome, excellent quality. (Imported seed.)

**Pkt. 15c; 1 oz. 50c; oz. \$1.50**

### White French

A valuable early variety, large white heads of good quality. Hardier and of the same season as summer cauliflower.

**Pkt. 15c; oz. \$1.00; 4 oz. \$3.00**

**NOTE.**—We made the above illustration from photographs to show the perfect heading qualities of our reselected strain of "**H. Q.**" St. Valentine Broccoli. Note how the large outer leaves form around and the smaller inside leaves completely cover the top of the head. This gives proper protection from frost, rain and sun. The heads will open up perfectly white and the quality and tenderness is unequalled.

**FREE BULLETINS AND PAMPHLETS** on general gardening and many special crops, also spraying, etc., are issued by the Oregon Agricultural College at Corvallis, Ore. These are sent free on request. We advise our customers to secure them. **THEY ARE OF GREAT VALUE.**



**"Highest Quality"****CABBAGE****True and Pure**

Our Cabbage Seeds come from the world's best growers—pure, true strains, of highest quality. One ounce will produce over 3000 plants. One-quarter pound of seed will produce plants sufficient for one acre, therefore, don't practice false economy by buying low-priced, low-quality seed.

"Carco," an inexpensive and very valuable insecticide for cabbage growers. Read about it on page 125.

**Early Jersey Wakefield**

The earliest and hardest heading of first early cabbages. Most gardeners depend upon it for the bulk of their extra early crop. Its exceeding hardness not only to resist cold but other unfavorable conditions, insures the greatest likelihood of profitable and satisfactory results. Our stock is grown and selected with the greatest care; there is none better, and few as good. Head conical, very compact, solid and of excellent quality. The thick, stout leaves and compact habit makes it the best sort for very early setting. **HIGHEST QUALITY SEED.**

Pkt. 15c; oz. 85c; 4 oz. \$2.75; 1b. \$9.00

**R. S. & F. CO.'S****OREGON WAKEFIELD**

A new, most remarkable and valuable strain of Wakefield. It has the same general characteristics of other Wakefield cabbages, the heads being conical with a rounded or blunt point. It is, however, far superior to other strains, being nearly double the size and of better quality, and at the same time is almost as early. It has few outer leaves, permitting close planting.

Pkt. 15c; oz. 75c; 4 oz. \$2.60; 1b. \$8.50

**EARLY YORK.**—A small, early, conical heading cabbage. Has been very popular. Plant close.

Pkt. 10c; oz. 60c; 4 oz. \$2.25; 1b. \$8.00

**== "Carco" Your Cabbage ==**

This new non-poisonous liquid properly used will insure your cabbage plants against the attack of the cabbage grub or maggot that eats the root. Don't fail to use it. See page 125.

**Early Jersey Wakefield.**

Edgewood, Cal., Jan. 15, 1918.

Routledge Seed & Floral Co.,

Dear Sirs: Last year I gave you an order for all my garden seeds. I found them of the highest and best quality. All of the seeds were as you guaranteed them to be.

Enclosed please find order.

Yours very truly,

FRANK E. ALEXANDER.

**Early Winnigstadt**

One of the best for general use, being very hardy, sweet, fine quality, and sure to head. Head regular, conical, very hard and keeps well both summer and winter. It is the hardiest, not only as regards frost, but will suffer less from excessive wet, drought, insects or disease than any other second early sort.

Pkt. 10c; oz. 75c; 4 oz. \$2.25; 1b. \$7.50

**Copenhagen Market**

The earliest large round-headed cabbage yet introduced. Sure to head and every head perfect. The plant is of vigorous habit but compact, with short stem and few outer leaves which are of rather upright growth. The leaves are medium light green, nearly round, comparatively thick and smooth. The heads are round, very solid and of exceptionally good quality. Its earliness, compact growth, uniformity and size of head, firmness and most excellent quality combine to make Copenhagen Market the most valuable cabbage of recent introduction. We recommend it unreservedly. Worth the additional price.

Pkt. 15c; 1/2 oz. 60c; oz. \$1.00; 4 oz. \$3.50; 1b. \$12.00.



## CABBAGE—Continued—Late Varieties

Wong Bok      Pe-Tsai

Or Chinese Cabbage

Chinese or Celery Cabbage has attained great popularity in the last two years.

We offer the true Pe-Tsai or Chinese Cabbage, which has been known and cultivated in China for many years. While practically unknown in many markets, the Chinese gardeners of the Pacific Coast have successfully cultivated it for years.

**Pe Tsai** produces beautiful, crisp, celery-like heads that blanch easily and that resemble a giant Cos Lettuce. As a salad it rivals the finest lettuce, while cooked like cabbage or spinach it makes a delightful "greens."

**Pe-Tsai** will not stand heavy frosts, so that heads intended for winter use should be dug and stored in a cool cellar.

Plant seed from June to August thinly in drills or grow like late cabbage and transplant to 1 foot apart in rows. When grown it can be blanched like celery by tying or wrapping up. Pkt. 10c; oz. 50c



## Danish Round Head

An earlier short-stemmed strain of the famous Danish Ball Head.

Large and very solid, round head on short stems, having the same keeping quality as the original strain of Danish Ball Head, earlier and produces larger yields. It is **ess good sized heads where other strains would** er winter there is no finer cabbage. Our s the originator in Denmark and is of the **Hig**

**Highest Quality.**  
Pkg. 15c; 1/2 oz. 60c; oz. \$1.00; 4 oz. \$3.25; 1lb. \$11.50



**Danish Ball Head or Hollander.**

## Danish Ball Head

Most remarkable late cabbage yet produced, heads hard and solid—fine grained and tender. Entirely distinct. Exceedingly hardy in resisting cold and wet weather. We offer true, pure seed of the very finest medium short stemmed type. Famous for its hard-heading qualities, which at once recommends it as highly valuable for shipping. The magnificent heads are round in form and keep in excellent condition during winter, coming out in the spring perfectly solid. Pkt. 15c; ½ oz. 35c; oz. \$1.00; 4 oz. \$3.25; 1b. \$11.50

## Premium

## Late Flat Dutch

A low growing variety; heads large, bluish green; round, solid, broad and flat on top; an excellent fall and winter variety, and a good keeper. It is a sure header. Our stock has been grown from carefully selected heads, and we consider it superior to any other strain of Flat Dutch cabbage on the market.

Pkt. 10c; oz. 70c; 4 oz. \$2.25;  
1b. \$7.00.

## PERFECTION

**DRUMHEAD SAVOY.**—A variety that is much prized by those who are familiar with it. It is very sweet and crisp, and always tender. Heads medium size and compact, with densely and uniformly crimped or savoy leaves.

Pkt. 10c; oz. 75c; 4 oz. \$2.25;  
1b. \$7.00.

**MAMMOTH ROCK BED.**—Best hard-headed, red variety; large heads, globular, and very deep red on top. **Very tender and excellent quality;** fine for cold salads on account of its attractive color.

Pkt. 10c; oz. 75c; 4 oz. \$2.25

**DO YOU SEND EAST** for your Seeds? It's bad policy. Spend your money on this Coast. Here's where you sell your products. Our Seeds are highest quality.



## CARROT

### Routledge Model—Coreless

The finest early table variety grown. Handsome, meltingly tender and sweet.

This new carrot is our own strain, grown from the French carrot, Nantes. You will be delighted with the melting tenderness and sweet, mild flavor of Routledge Model.

It is a half-long cylindrical carrot, blunt pointed, with a small tap root and small top. They run very uniform in shape and grow just the right size for table use. The flesh is of fine texture, entirely devoid of stringiness, coarseness and woody heart; color orange scarlet, very attractive when served.

Pkt. 10c; oz. 25c; 4 oz. 75c; lb. \$2.50

Sherwood, Ore., Nov. 1, 1918.

Routledge Seed & Floral Co.,

Dear Sirs: I was very much pleased with your Seeds I planted this year. Everything came up good.

I was more than pleased with the sweet, tender quality of Routledge's Model Carrots. They are certainly a fine variety.

Very truly,

C. M. STIPES.

### EARLY SCARLET HORN

May be planted very early in spring, and is an excellent summer variety. Tops small and roots grow about 3 inches long; reddish-orange and good flavor.

Pkt. 10c; oz. 20c; 4 oz. 50c; lb. \$1.25

### Chantenay

The Market Gardener's Favorite.—Tops medium sized, necks small, roots tapering slightly, but uniformly stump-rooted and smooth; color deep orange-red; flesh very crisp and tender; medium early; a heavy cropper.

Pkt. 10c; oz. 20c; 4 oz. 45c; lb. \$1.15



Chantenay.

Corvallis, Oregon, April 24, 1918.

Routledge Seed & Floral Co.,

Gentlemen: The Tomatoes, Cauliflowers and Brussels Sprouts you sent me a few days ago are doing fine.

Respectfully yours,

MARY R. SCOTT



Routledge Model—Coreless.

### DANVER'S HALF-LONG

A great favorite; big cropper; the roots are smooth and handsome, medium size, tapering uniformly to a blunt point and of a rich, dark orange; fine for table. On account of its productiveness it is a profitable variety to grow for stock feeding.

Pkt. 5c; oz. 15c; 4 oz. 45c; lb. \$1.25

### LONG ORANGE IMPROVED

The best of the long carrots, especially for stock; color bright orange, with long, tapering roots, requiring a deep soil.

Pkt. 10c; oz. 15c; 4 oz. 50c; lb. \$1.35

### ROUTLEDGE MAMMOTH, next page.

**GUERANDE, OR OXHEART.**—Bright orange, broad at the top and terminates abruptly in a small tap root. Length about 4 to 5 inches; excellent for shallow soils. Excellent for shallow soils.

Pkt. 10c; oz. 20c; 4 oz. 60c; lb. \$1.50

**LARGE WHITE BELGIAN.**—Extensively grown for stock feeding; roots white; green above ground and growing to a large size; flesh rather coarse. A good cropper.

Pkt. 5c; oz. 15c; 4 oz. 40c; lb. \$1.25

### Dad's Electric Lantern—A Penetrating, Bright Light

The best and safest light for the farmer. No matches or danger of fire around the barns. See page 122.

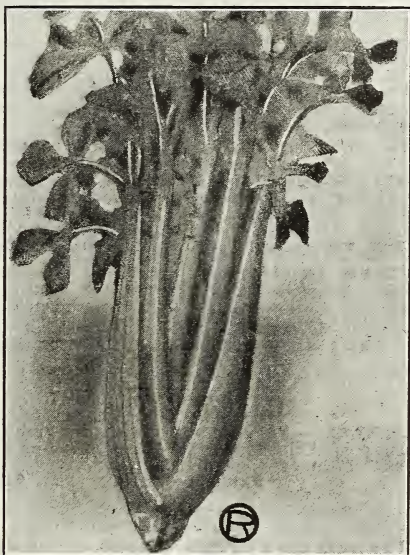


## CARROTS—Continued

### Routledge Mammoth Stock Carrot

The heaviest cropping carrot grown, yielding more tons to the acre than any other sort. The flesh is yellowish-white, crisp and solid, and very sweet in flavor. It is a vast improvement on the Belgian soys, which have been favorites in the past, as it is not only much more productive, but vastly easier to handle. The roots are short and very heavy at the shoulder, rendering them easily harvested. Too much can scarcely be said of their size and great productiveness. Every farmer should grow a good supply of carrots for winter feed and Routledge Mammoth is the kind to plant. Yields reported from 20 to 50 tons per acre.

Large pkt. 10c; oz. 20c; 4 oz. 50c; lb. \$1.50  
2 lbs., enough for one acre, \$2.50.



Paris Golden Self-Blanching.

Parkdale, Oregon, July 19, 1918.

Routledge Seed & Floral Co.,

Gentlemen: I wish to tell you that the Celery Plants you sent us arrived in excellent condition. We have never had such well-packed plants from other seedsmen and the plants themselves are superior to any sent us heretofore.

Thanking you very much,

Very sincerely yours,

MRS. G. M. UPTEGROVE.

### GIANT PASCAL

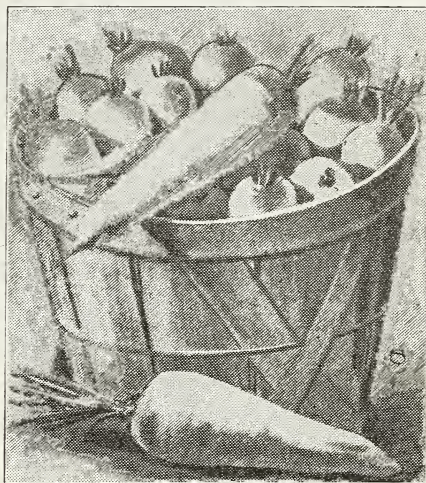
Excellent for fall or winter use, and has increased in popularity every year. A large, tall grower of the finest nut flavor, being free from any bitter taste. Very broad stalks, blanching very quickly with little banking up; an admirable keeper.

Pkt. 10c; oz. 35c; 4 oz. \$1.00

### Winter Queen

One of the best winter varieties, and highly recommended. It is tall and forms a large bunch. The leaves are light green.

Pkt. 5c; oz. 30c; 4 oz. 75c



Routledge Mammoth.

Highest  
Quality

## CELERY

Plants  
Page 37

### R. R.'S WHITE PLUME

Our Leading Early White Celery.

A handsome, crisp sort, of very easy cultivation. Naturally its stalks and portions of inner leaves and heart are white, so that by closing the stalks, either tying or by simply drawing the soil up against the plant and pressing it together, the work of blanching is completed without the troublesome process of "banking" or "earthing up." It is the earliest celery known, delicious and fine flavored.

Pkt. 10c; oz. 40c; 4 oz. \$1.25

### PARIS, GOLDEN SELF-BLANCHING

The finest strain of French grown seed. This splendid variety is without doubt the most popular celery grown. It is a self-blanching sort, for with a little banking or covering, even the outer ribs assume a beautiful golden yellow, while the heart or vine stalks are deliciously tender, brittle and sweet. This variety is being very extensively grown both for market and private use, not only on account of its ease of cultivation, but for its superior quality. It is not quite so early as the White Plume, but is of heavier and more compact growth, the stalks being thick, crisp and brittle.

Select quality: Pkt. 15c; ¼ oz. 40c; oz. \$1.25; 4 oz. \$4.00.

### GOLDEN YELLOW SELF-BLANCHING.—

Same variety of celery as above, but is American grown. It is equal to most seeds offered, but not as true, dependable or of such high quality as the French grown stock.

Pkt. 10c; oz. 50c; 4 oz. \$1.50

## CELERIAC

Turnip Rooted Celery, see page 19.

For complete seed and plant tables, amount to plant, etc., see complete reference tables inside back cover. Always refer to "Index," pages 2 and 3, for anything wanted.



## "Highest Quality"

## CAULIFLOWER

## Plants Page 37



Routledge Snow White.

**EXTRA EARLY SNOWBALL (Extra Selected).**—This is the choicest selected strain of the popular Erfurt type, and is remarkable for its extreme earliness and reliability in heading. Medium size heads. Plants quite dwarf.

Pkt. 25c; ¼ oz. \$1.50; oz. \$4.00

**VEITCH'S AUTUMN GIANT.**—A large, late variety, very hardy. The heads are well protected by the foliage, enabling it to resist unfavorable climatic conditions.

Pkt. 10c; ¼ oz. 60c; oz. \$1.50; 4 oz. \$5.00

## ROUTLEDGE'S "SNOW WHITE"

## The Finest Cauliflower Grown.

In competition with all other strains, this cauliflower has won the approval of critical gardeners, being early and also the **best main crop** sort grown. It is suitable not only for early use, but is superior for late planting. The heads are compact, firm and solid, and do not spread as do some of the inferior sorts. No other equals it in purity of color, being **clear snow white**. It is equally desirable for family use and for the market garden. The heads are large—from 9 to 12 inches in diameter. Very resisting against unfavorable seasons and dry weather, the foliage giving a splendid protection.

Pkt. 25c; ¼ oz. \$1.60; ½ oz. \$3.00; oz. \$5.00

## EARLY SNOWBALL

This variety is much in demand by market gardeners. Its earliness, compact habit, large-sized heads and snow-white color recommend it to every grower as a variety of especial merit. We have an extra selected stock of this sort, and recommend it with the greatest confidence.

Pkt. 25c; ¼ oz. \$1.25; ½ oz. \$2.25; oz. \$4.00

**NEW CALIFORNIA WONDER.**—A late variety, forming good, large, solid heads during the winter. This variety has given great satisfaction in Oregon and California, wherever tried. Pkt. 20c; ¼ oz. 50c; oz. \$1.50; ¼ lb. \$5.00

**ALGIERS.**—A very strong growing late variety, with large leaves of a bluish cast. In cool locations and rich soil it produces very large, solid, white heads late in the fall.

Pkt. 15c; ¼ oz. 75c; oz. \$2.25; 4 oz. \$6.00

## CHICORY

**WITLOOF**—Called also "French Endive" and "Christmas Salad"

Heretofore large importations have been made, but it is easily grown here. Plant the seed in the spring in drills, 12 inches apart, and thin out to 3 or 4 inches apart in the row. About November pull up the roots, break off the leaves, side shoots if any, and small root end so that the roots are not over 10 inches long. At once, or later as you get time, dig a trench about 18 inches deep and reset these trimmed roots crowns up, placing them about 1½ inches apart. Cover with loose, rich soil; the roots should be set in the trench so that the top will be covered about 8 inches. They will soon make thick shoots or top growth (below the surface) which is the edible part. Dig as wanted, cut just below the crown and serve with French or "mayonnaise" dressing. Witloof is really a delicate and delicious dish.

Pkt. 10c; oz. 75c

**LARGE ROOTED OR COFFEE.**—Grown quite extensively for the large thick roots, which are sliced, dried, roasted, and ground as a substitute or adulteration for coffee. To secure large smooth roots the soil should be light, rich, and deeply worked, and the plants should be thinned out to stand four to six inches apart.

Pkt. 10c; oz. 50c; 4 oz. \$1.50

## CHERVIL

**CURLED.**—An aromatic herb, resembling parsley, and used for flavoring in soups and salads. Fine for garnishing.

Pkt. 10c; oz. 30c; 4 oz. \$1.00

## CRESS

**CURLED OR PEPPER GRASS.**—Used as a salad and fine for garnishing.

Pkt. 10c; oz. 20c; 4 oz. 60c

**TRUE WATER.**—This is quite distinct from the former and only thrives when its roots and stems are submerged in water. It is one of the most delicious of small salads.

Pkt. 15c; oz. 60c

## COLLARDS

**TRUE GEORGIA.**—Used as "greens" mainly in the South and West. As the leaves are pulled off, others grow in their places.

Pkt. 10c; oz. 25c; 4 oz. 65c

## CORN SALAD

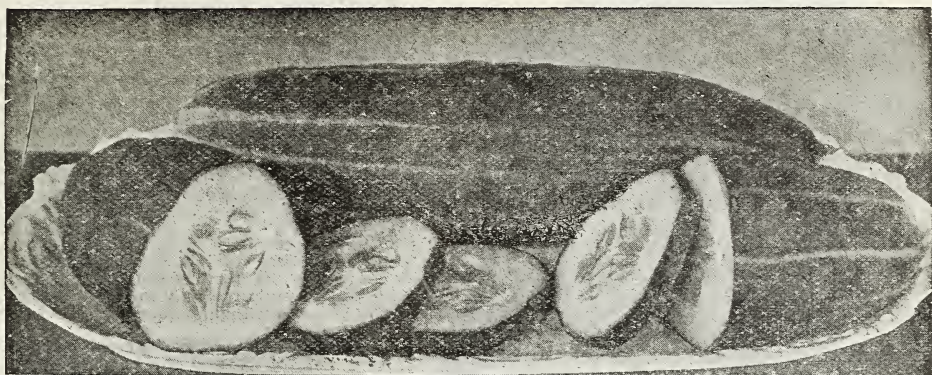
**Fetticus or Lamb's Lettuce.**—This is a hardy winter salad, the small leaves being served like lettuce during the cool fall and early winter months. It does not succeed during warm weather, and the seed should be sown thinly in drills during August, September, and October to supply fresh leaves during the cool fall and winter months. It is quite hardy, and after cold weather sets in can be protected by a thin mulch of soft hay or straw.

Pkt. 10c; oz. 25c; 4 oz. 75c

**BUG DEATH** kills all leaf-eating insects; excellent for using on cabbage, cauliflower, etc. Can be used either dry or in water. See description, page 125; also dusters and blowers, page 128.



## CUCUMBERS



**Routledge Highest Quality Cucumber.**

### Routledge Highest Quality

A quick grower and always commands "fancy prices" on account of its fine form and superb quality.

It is the earliest white spine cucumber, suitable for table, market or shipping purposes, under all conditions of culture, whether under glass or in the open ground.

Color a very deep green, which it retains during a long period, while in symmetry of form it is so regular, so uniform, as to create comment wherever seen.

Quality is superb, being exceedingly brittle and crisp. The flavor is delicate and entirely devoid of the bitter taste so frequently noticed in other varieties.

Pkt. 10c; oz. 20c; 4 oz. 50c; lb. \$1.50

### Arlington White Spine

One of the best sorts for table use. Vines vigorous, fruiting early and abundantly. Fruit uniformly straight, light, bright green in color, with a few white spines. Flesh crisp, tender and of excellent quality.

Pkt. 5c; oz. 15c; 4 oz. 45c; lb. \$1.25

### Improved Long Green

The leading large variety. Fruit from 10 to 12 inches long, dark green, crisp and tender. A good variety for slicing, and when ripe they are the best for sweet pickles.

Pkt. 10c; oz. 15c; 4 oz. 50c; lb. \$1.25

### Davis' Perfect

As now selected, the long, even fruits are of fine form, with an intensely dark rich green skin. The solid white flesh is of superb quality for slicing. So handsome and regular are the fruits, even when grown outside, that they bring an extra price on the market, often being taken for "hot-house grown."

Pkt. 10c; oz. 20c; 4 oz. 50c; lb. \$1.25

**GHERKIN FOR PICKLING.** — A very small, oval, prickly variety, quite distinct from all other. Pkt. 5c; oz. 20c; ¼ lb. 50c

**JAPANESE CLIMBING.** — A vigorous grower, can be trained on a trellis or the garden fence, thereby saving ground space. Fruit from 12 to 16 inches long, dark green and smooth. Flesh pure white, crisp and tender. Pkt. 5c; oz. 15c; 4 oz. 40c; lb. \$1.25

### Lemon Cucumber

New. Highly recommended by all who have tried it for slicing and salads. Resembles a lemon both in size, form and color. Has a distinctive and delicious flavor superior to and not found in any other cucumber. A variety of real merit—try it.

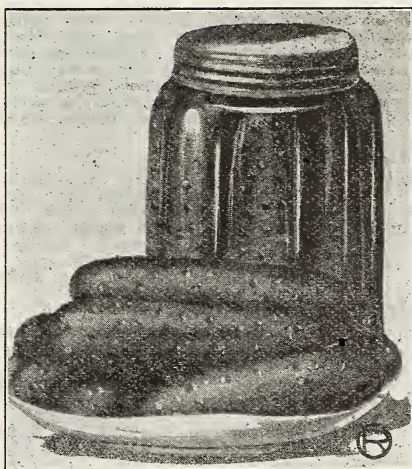
Pkt. 10c; oz. 25c; 4 oz. 75c

### Boston Pickling

A distinct variety, very popular for pickles; color bright green, a great producer and of excellent quality. It is for producing medium-sized pickles that this variety is so highly esteemed. If the fruits are gathered as soon as large enough, the vines will continue bearing through a long season.

Pkt. 5c; oz. 15c; 4 oz. 40c; lb. \$1.25

**EARLY SHORT GREEN.** — A very early and productive variety, bright green, rather short, straight and a little smaller at the ends. Crisp and tender. Good for pickling or slicing. Pkt. 5c; oz. 15c; 4 oz. 40c; lb. \$1.25



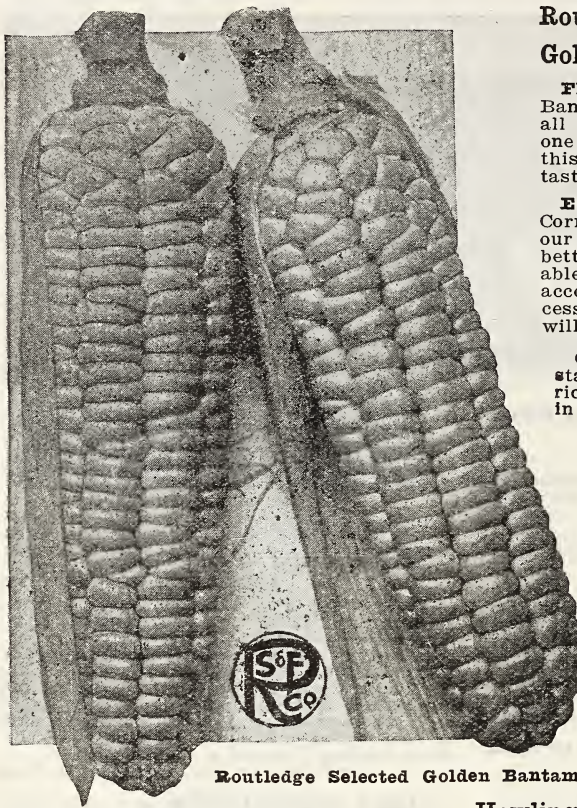
**Boston Pickling.**

**USE WONDER.** — So many of our customers tell us of the wonderful results, the increased yield and quick growth obtained by using our Odorless "Wonder" Fertilizer, that we again call **YOUR** attention to it. Remember you can get it by parcel post. See page 38.



## Selected CORN—SWEET OR SUGAR Northern Grown

Packet and single pound prices only prepaid. Add postage to 10 lb. prices if wanted by mail. Write for quantity price.



Routledge Selected Golden Bantam. 40c; 10 lbs. \$3.25.

### Routledge's Selected Golden Bantam

**Flavor.**—Without exception, Golden Bantam Corn is the richest in flavor of all varieties; a sweet corn of which one will never tire. The first trial of this delicious Sweet Corn creates a taste "like more."

**Earliness.**—Golden Bantam Sweet Corn is only exceeded in earliness by our "Superb," but we like the quality better. It matures quickly and is suitable not only for early planting (on account of its hardiness), but a succession of sowings may be made which will give continuous supply until fall.

**Color.**—When picked at the proper stage of its growth the kernels are a rich, creamy yellow and unsurpassed in quality.

**Growth.**—Being dwarf in its growth, with stalks small in size, it can be planted quite close, and a large crop may be obtained on a small area. The ears are 8 to 10-rowed, and about 6 inches long—just the right size for the table.

Remember our selected strain is northern grown, better flavored and truer than most seed offered. There is no other yellow or golden sweet corn that can compare to our selected Golden Bantam. Try it and be convinced.

Price: Large pkt. 15c; 1b.

### Routledge Superb

We do not hesitate to recommend this new sweet corn to our customers. Its earliness, hardiness, size and quality make it of real merit to the western planters. It is extremely early, almost two weeks ahead of Golden Bantam and one week ahead of Portland Market. The large ears are always well filled with 12 to 14 rows of large, plump, white, sweet grains, of handsome appearance and excellent quality.

Large pks. 15c; 1b. 45c; 10 lbs. \$3.50

### Portland Market

An Oregon introduction, a very early large eared sweet corn and very productive. Its large well-filled ears, together with its plump, sweet grains of purest white, makes it a most profitable home or market variety. Very popular with our market gardeners.

Large pkt. 15c; 1b. 35c; 10 lbs. \$3.00

### Early Evergreen

This fine variety is 10 to 12 days earlier than Stowell's Evergreen and yields large, handsome, 10 to 12-rowed ears. An excellent variety to follow the first early kinds. Near Portland it will make a late or main crop variety.

Large pkt. 15c; 1b. 35c; 10 lbs. \$3.00

### Early Minnesota

This old and deservedly popular variety is one of the best early sorts for the market.

Large pkt. 15c; 1b. 35c; 10 lbs. \$2.75

**FIELD CORN**—Don't overlook what we have to offer in OREGON-GROWN FIELD CORN; "the best ever." See page 45. For HAND CORN PLANTERS write us.

### Howling Mob

This is one of the newer varieties that has become very popular here for main or late crop. The seed we offer is Oregon grown and acclimated. You must remember that the early corn listed by Eastern seed houses will be late here.

**Howling Mob** is a large-eared, vigorous grower, ears large, well protected with husks and having 12 to 16 rows of the sweetest flavored, tender, delicious white corn—good for canning.

Large pkt. 15c; 1b. 45c; 10 lbs. \$3.25

### EVERGREEN FODDER

This is the best of all the sweet corns to grow for green fodder for stock; much richer than field corn, large cropper but ears will not mature. Stalks sweet and rich.

1b. 30c; 10 lbs. \$2.25

### Stowell's Evergreen

A good main crop or late sort. Remains longer in green state than any other. Very large ears, with deep grains, and remarkably sweet. Locally it must be planted early to mature. Quite extensively planted by dairymen for feeding green on account of its sweetness.

Large pkt. 15c; 1b. 35c; 10 lbs. \$3.00

### POP CORN

**WHITE RICE**—Most popular and profitable kind; short ears, white, pointed kernels.

Large pkt. 15c; 1b. 35c; 10 lbs. \$3.00



## DRY FRUIT AND VEGETABLES

By securing a "Home" Evaporator you can, with very little trouble, dry your surplus fruit and garden truck for winter use. It will give you more variety and reduce your grocery bill. See Page 123.

### CELERIAC

**Turnip Rooted Celery.**—The roots, which are the edible portion, keep well for winter use and are excellent for soups and stews. They are also cooked and sliced as a salad. Sow seed at the same season and give the same treatment as any root crop.

**LARGE REFURT.**—An improved form, producing large, smooth roots, which are nearly round.

Pkt. 10c; oz. 25c; 4 oz. 75c

### EGGPLANT

Sliced and fried takes the place of meat. Culture same as for tomatoes.

**NEW YORK IMPROVED SPINELESS.**—Considered the best variety. Oval shaped, deep purple, large size and fine flavor.

Pkt. 15c; ½ oz. 45c; oz. 75c

### ENDIVE

This plant furnishes an attractive and appetizing salad for the fall and winter months or by repeated sowings a supply may be had nearly all the year round. Useful in flavoring soups, stews, etc. Makes delicious greens if cooked like spinach. Cultivation same as for lettuce. The bleaching of Endive is brought about by drawing the leaves together into a head and tying them and this should be done a month before it is wanted for table use.

**BROAD LEAVED BATAVIAN.**—Leaves are broad, thick, green, more or less twisted and waved with white mid-ribs. It forms large hearts, which when blanched, form one of the best winter salads. Crisp, tender and fine flavor.

Pkt. 5c; oz. 15c; 4 oz. 50c; lb. \$1.50

**GREEN CURLED.**—The hardest of all, with beautifully curled dark green leaves, tender and crisp.

Pkt. 5c; oz. 15c; 4 oz. 50c; lb. \$1.50

**WHITE CURLED.**—Very tender and light green, blanches easily, very ornamental.

Pkt. 10c; oz. 20c; 4 oz. 50c; lb. \$1.50

### GARLIC

Garlic is a perennial plant with a bulbous root and belongs to the onion family. It has flat leaves and the bulb is composed of several parts or bulblets similar to those of a multiplier onion set. We cannot offer seeds but can supply the bulbs or sets.

Prepare the ground as for onions, separate the sets and plant them in drills eight inches apart and four to six inches apart in the drill, covering two inches deep. Cultivate like onion sets. When the leaves turn yellow, pull up the bulbs and dry in the shade.

Per lb., 35c, postpaid  
Write for quantity price. Requires about 250 lbs. sets per acre.

### HORSERADISH ROOTS

Will form radishes of large size in one season's growth. For prices, see Vegetable Plants and Roots, page 117.



Dwarf Green Curled.

### KALE, or BORECOLE

This is a popular boiling-green resembling cabbage in flavor. The plant is entirely hardy in well-drained soil and can be grown easily from seed planted during the summer and fall months. With the tall varieties it is customary to pull off the lower leaves and let the plant grow on to furnish a continuous supply. The sweetness and flavor of these greens are improved by frost or light freeze.

**DWARF GREEN CURLED.**—Beautifully curled, bright green leaves, tender and of fine flavor.

Pkt. 10c; oz. 25c; 4 oz. 75c; lb. \$2.50

**TALL GREEN CURLED.**—Grows about 2 feet high; leaves dark green; curled and wrinkled; very hardy.

Pkt. 5c; oz. 25c; 4 oz. 75c; lb. \$2.25

**EMERALD ISLE.**—A very handsome variety of medium height. Leaves attractive, closely curled and of fine flavor.

Pkt. 10c; oz. 25c; 4 oz. 75c; lb. \$2.50

**THOUSAND-HEADED.**—For stock feeding. Pkt. 5c. See Field Seeds, page 44.

### KOHL-RABI

A delicious vegetable. In growth this is half-way between cabbage and turnip; the edible portion is the large bulb which forms on the stem above the soil. By making successive sowings, tender bulbs may be had throughout summer and fall, and are highly esteemed for their mild, delicate, cabbage-like flavor. Slice and boil, discarding the hard lower part of bulb. Sow in drills or raise and transplant like cabbage 6 to 10 inches apart.

**EARLY WHITE VIENNA.**—Extremely early, medium size, excellent quality.

Pkt. 10c; oz. 30c; 4 oz. 90c

### LEEK

A species of onion which does not form a bulb, but is used for its mild and delicious root, stem or neck. Plant in rows and thin to about four inches. Hardy, and frost improves the flavor. Hill up to whiten.

**AMERICAN FLAG.**—Mild and sweet; long, large stems; hardy and of the finest quality.

Pkt. 10c; oz. 30c; 4 oz. 90c

**CARENTAN.**—Very broad, thick stems of good flavor. Very large variety.

Pkt. 10c; oz. 35c; 4 oz. \$1.25

On Cucumber and Garden Plants use "Bug Death" for Insects (see page 125), and "WONDER FERTILIZER" (see page 38), and you will be more than pleased with results.



## LETTUCE

### Grand Rapids

Very popular with private gardeners and as a lettuce for greenhouse forcing. It will stand shipping better than most curled sorts. Of quick growth and stands for some days after being fit to cut. The plant is upright, and forms a loose head or cluster of large, bright green leaves, finely crimped and ruffled; rather thin, good flavor, crisp and tender. Pkt. 10c; oz. 20c; 4 oz. 50c; lb. \$1.50

**SIMPSON'S EARLY CURLED.**—A very extensively used early loose-leaved, or clustering variety. Leaves light green, slightly frilled, crisp, sweet and tender.

Pkt. 5c; oz. 15c; 4 oz. 35c; lb. \$1.25

**EARLY PRIZE HEAD.**—A large, clustering, non-heading lettuce, most excellent for the home garden and undoubtedly the most easily grown variety in cultivation. It is too tender, however, to stand shipping or handling on the market. Leaves finely curled and crumpled, bright green tinged with brownish red, very crisp, tender and sweet. Pkt. 5c; oz. 15c; 4 oz. 35c; lb. \$1.25

### Trianon Cos or Romaine

**EARLY WHITE COS—Self Folding.**—Distinct in having long, narrow, spoon-shaped leaves, folding into loose, sugar-loaf-shaped heads which blanch better by having the outer leaves drawn about them and tied. Leaves yellowish white, crisp, tender and of a distinct and pleasing flavor.

Pkt. 5c; oz. 15c; 4 oz. 35c; lb. \$1.25

### Big Boston—Improved

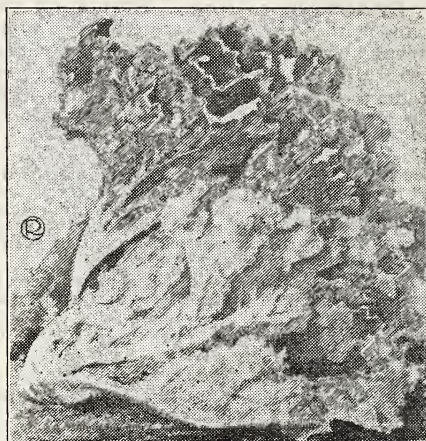
Plants large, very hardy and vigorous. Leaves broad, comparatively smooth, wavy at edges, thin, very firm and crisp; color bright light green, slightly tinged with reddish brown. Grown extensively in the South for shipment north in the winter. It usually heads up under cold weather conditions better than any other variety.

Pkt. 5c; oz. 15c; 4 oz. 45c; lb. \$1.50

**OUR MOTTO:**  
Quality first,  
price as low  
as we can  
make it.



R. R.'s Wonderful



Grand Rapids.

### HANSON

**Improved Hard Heading Stock.**—The leading head lettuce. We can recommend this as one of the very best. Heads green outside and white inside; grow to a remarkable size; very solid, and is deliciously sweet, crisp and tender. It withstands the hot sun.

Pkt. 10c; oz. 20c; 4 oz. 50c; lb. \$1.50

Fort Bragg, Cal.

Routledge Seed & Floral Co.,

Gentlemen: Your Lettuce is true to the name. They are wonderful.

Our grocery man pays one cent premium on every head we raise. First we had to convince him, as he specialized in Los Angeles Lettuce before.

Yours truly,

HERMAN A. MATSON.

Chehalis, Wash., June 26, 1918.

Routledge Seed & Floral Co.,

Dear Sirs: Kindly send me as soon as possible 15 cents worth of Lettuce Seed (Wonderful). It is the best we ever bought.

Thanking you very much,

Yours very respectfully,

KARL CONZELMANN.

### R. R.'s Wonderful

A reselected, hand-picked strain of the original New York or Wonderful. Our grower has given this stock special attention and it is a wonderful strain. It produces immense heads of closely folding ruffled leaves. The heart blanches beautifully and is crisp, tender and delicious. A robust variety, rooting deeply and thus able to resist hot, dry weather; slow to seed and a sure header. The outer color is of a distinct apple-green. A rapid grower and unsurpassed as a home or market lettuce.

Read reports above.

Pkt. 10c; ½ oz. 15c; oz. 25c; 4 oz. 60c; lb. \$2.00.

**A NEW STRAWBERRY**—Read about the wonderful "Marvel," a new variety of sterling merit, most delicious of all. Get a start—you'll be delighted. See Page 115.



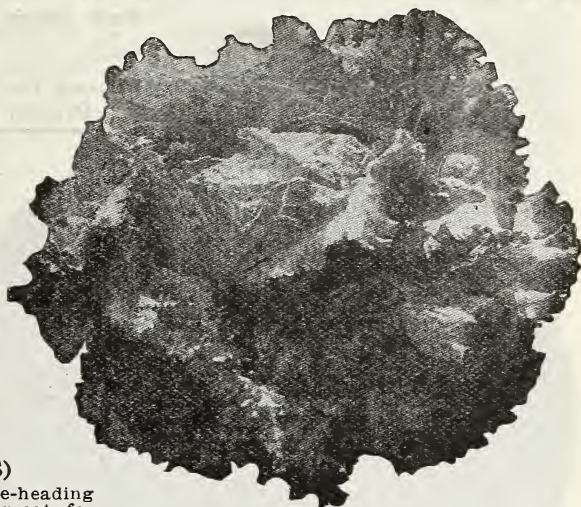
## LETTUCE—Continued

### R. R.'s Tender Crisp

A distinct and extra choice variety for those who like curly, crisp, tender Lettuce of the finest quality.

Grows to a large size, makes most desirable heads of pleasing appearance, and retains its crispness and mild flavor to a greater degree during the hot summer months than any other crisp-head variety. While especially adapted for midsummer, it is most desirable also for spring and fall. The plants are of quick, strong growth; the leaves are of a soft, bright green, growing closely around the heads, which are tightly folded and blanch to a silvery white, and are crisp and brittle as could be desired.

Pkt. 10c;  $\frac{1}{2}$  oz. 15c; oz. 20c; 4 oz. 60c; lb. \$2.00.



R. R.'s Tender Crisp Lettuce.

### NEW YORK (LOS ANGELES)

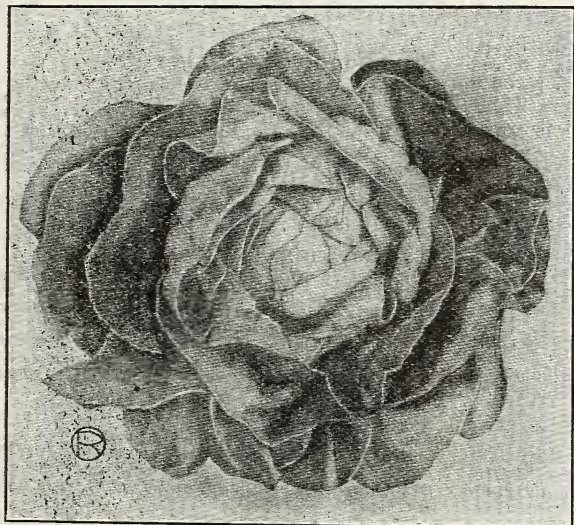
A large, crisp, curly-leaf, close-heading lettuce of the finest quality. A great favorite in the markets of Los Angeles and San Francisco. Carloads of this variety are shipped by California growers and it brings the highest prices.

Pkt. 10c; oz. 20c; 4 oz. 60c; lb. \$2.00

### Early May King

The plants are of quick growth, practically all head and extremely handsome. From early spring plantings in the open ground they grow quickly to a diameter of 6 to 7 inches with the broad, light-green outer leaves folding closely about the round solid head. The inner leaves (practically the entire head) are blanched to a rich golden yellow and have a specially fine, rich, buttery flavor.

Pkt. 5c; oz. 15c; 4 oz. 40c; lb. \$1.25



Wayahead—Extra Early.

## OUR MOTTO IS

"Highest Quality"

It's quality **FIRST**, then price as low as possible. The best seeds are the cheapest in the end, even though they cost a little more.

Silverton, Oregon, Feb. 2, 1918.

Routledge Seed & Floral Co.,

Dear Sirs: Received your seeds in number one order and found them better than any I can get here for the same price.

Yours respectfully,

CARL L. ZIMMERMAN.

### Way-a-head Extra Early

A new lettuce showing a remarkable combination of earliness, firm heading character, handsome appearance and fine quality. Both in cold-frames early in the spring and in the open ground—in spring, summer and early fall months—it has proved to be not only the **earliest** and one of the **surest heading** of all early lettuce, but also of the **very finest quality**. It is not only earlier than May King and other fine early varieties, but the tightly folded heads are generally larger in size. The outer leaves are a light green, with the inner head finely blanched to a rich buttery yellow. We urge you to try this new variety (see cut).

Pkt. 10c;  $\frac{1}{2}$  oz. 15c; oz. 20c; 4 oz. 60c; lb. \$2.00.

**PLANT SMALL FRUITS** around your garden. What's nicer than delicious fresh fruit, fresh from your garden? See Fruit Department, pages 108 to 117.



## True Seeds

## ONION

## Highest Quality

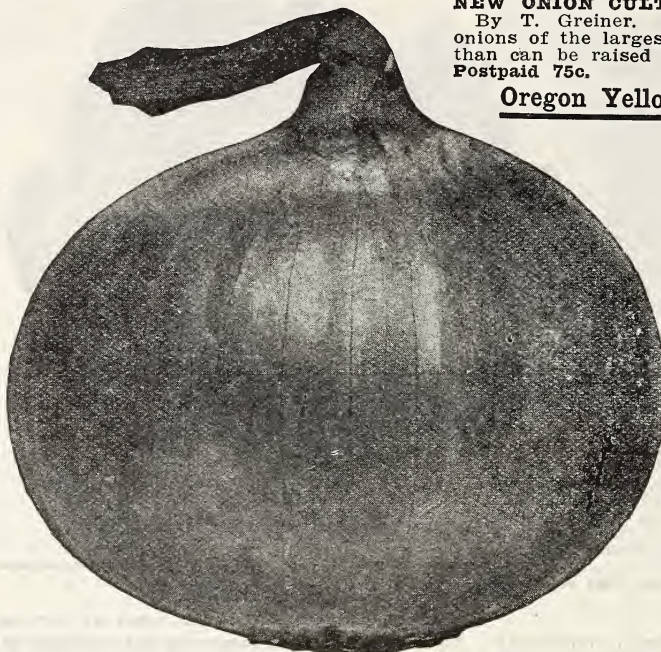
## NEW ONION CULTURE

By T. Greiner. A new method of growing onions of the largest size and yield on less land than can be raised on the old plan. 140 pages. Postpaid 75c.

Oregon Yellow Danvers

This is the variety planted almost entirely in the Northwest, particularly in Oregon. The largest crops of onions and the best keepers, bringing the highest prices in the Pacific Coast and Middle Western markets, are the Oregon Yellow Danvers. The bulbs are uniformly large, three-quarters globe shape, with small necks. It is the earliest, largest in size, most perfect in shape, the largest cropper and the best keeper, and as a market or table onion cannot be excelled. Our seed is grown specially for us by the best onion seed growers in Oregon. No onion grower can afford to plant anything inferior when such seeds can be obtained at the following prices:

Pkt. 10c; oz. 35c; 4 oz. 90c; lb. \$3.00.



Oregon Yellow Danvers Onion

St. Helens, Oregon.

Routledge Seed & Floral Co.,

Gentlemen: The seed we ordered from you came up splendidly.

Yours very truly,

MRS. JAMES ELLISON.

**Yellow Globe Danvers**

One of the most extensively used yellow onions. Bulbs of good size, uniformly globe-shaped, with small neck, and ripen very evenly. Flesh white, crisp and of mild and excellent flavor. An enormous yielder and a fine keeper. We offer a select strain, unsurpassed.

Pkt. 10c; oz. 25c; 4 oz. 75c; lb. \$2.50

**Australian Brown**

Its remarkable keeping qualities and handsome appearance makes it very desirable. Resembles the Yellow Danvers in general appearance, but has a clear, amber-brown skin. It matures early, ripens uniformly and is a good, long keeper.

Pkt. 10c; oz. 25c; 4 oz. 75c; lb. \$2.25

**Southport White Globe**

An enormous yielder and superb keeper; perfect globe-shaped, very large, clear white skin and considered one of the handsomest varieties grown. Planted extensively by market gardeners for green onions.

Pkt. 15c; oz. 40c; 4 oz. \$1.25; lb. \$4.00

**WHITE PORTUGAL or Silverskin**

The finest flavored of all the white-skinned onions. Quite early, half-globe shaped, a fine cropper; very firm and an excellent keeper. Planted thickly in broad drills makes fine pickling onions. (Short crop.)

Pkt. 15c; oz. 50c; 4 oz. \$1.50; lb. \$5.50

**Large Red Wethersfield**

The Standard variety of the red onions. Of large size, half globe, a heavy yielder, and one of the best for keeping. Skin a deep purplish red, smooth and glossy; will do better on fair upland soil than most varieties; flesh white, rather strong.

Pkt. 5c; oz. 25c; 4 oz. 75c; lb. \$2.25

**Routledge Prize Taker**

This onion has become a great favorite on account of its large size and great solidity. It is perfectly globe-shaped, with straw-colored skin; the necks are very small and the onions always ripen up hard. An excellent keeper, exceedingly fine, mild flavor and a very popular variety. (See cut.)

Pkt. 10c; oz. 30c; 4 oz. \$1.00; lb. \$3.00

**Extra Early Red Flat**

The first Red Onion to ripen. A medium-sized, flat variety; an abundant producer and very uniform in shape and size; fine grained, mild flavored, and comes into use nearly two weeks earlier than the Large Red Wethersfield; very desirable for early market use.

Pkt. 5c; oz. 25c; 4 oz. 75c; lb. \$2.25

Meacham, Oregon, May 6, 1918.

Routledge Seed & Floral Co.,

Dear Sirs: The seeds that I have received from you are excellent, the best I have received from any seed company, and I have tried many of them.

Thanking you for your prompt reply to my order, I remain,

Yours respectfully,

C. E. HANNA.

**DO YOU SEND EAST for your Seeds? It's bad policy. Spend your money on this Coast. Here's where you sell your products. Our Seeds are highest quality.**



## ONION

### Highest Quality—True Seed

Salado, Oregon, April 21, 1918.

Routledge Seed & Floral Co.,

Gentlemen: The Onion Seed I got from you last year was the best I've ever had.

MRS. NELLIE DAVENPORT.

**SOUTHPORT RED GLOBE.**—A large, globe-shaped, bright purplish-red variety. Is a late sort and an excellent keeper. A very handsome variety and of fine quality.

Pkt. 10c; oz. 40c; 4 oz. \$1.00; lb. \$3.50

#### WHITE BARLETTA—QUEEN

An early white variety; prized for home gardens and pickling on account of its small size. White Portugal is a much better keeper. (Very short crop.)

Pkt. 15c; oz. 75c

#### Crystal White Wax

A large, pure white, flat onion. During the last few years it has become very popular. Extremely early and one of the mildest and sweetest of all. It is very fine for slicing, the color being so clear and pure. We offer the genuine true seed. (Short.)

Pkt. 15c; oz. 50c; 4 oz. \$1.50; lb. \$6.00

## ONION SETS

**NOTE.**—Onion sets subject to market changes; short crop this year.

**BOTTOM ONION SETS.**—These small onions are grown from seed that have been sown too thick to attain a large size. The small onions (about ½-inch in diameter) thus obtained are planted out and are ready in a short time to pull as green onions for the table.

Per lb. 35c; not postpaid 30c or 3 lbs. 75c. Write for quantity prices.

**TOP SETS.**—Lb. 35c; not postpaid 25c.

**SHALLOTS.**—Valuable for bunching or for an early crop. Each bulb makes from 3 to 5 green onions.

Per lb. 35c; 4 lbs. \$1.25; prepaid

## OKRA

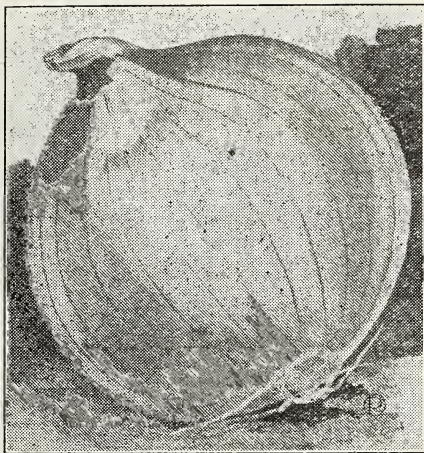
**IMPROVED DWARF GREEN.**—Very productive; long, slender green pods.

Pkt. 5c; oz. 15c; 4 oz. 30c



Mushrooms.

**MUSHROOM CULTURE.**—We have a 32-page booklet on Mushroom Culture, nicely illustrated, for 25c, postpaid. Free with an order for 10 bricks.



Routledge Prize Taker (see next page).

## MUSTARD

The leaves of mustard make excellent greens of sharp, pungent flavor, and are cooked the same as spinach or beet leaves.

**SOUTHERN GIANT CURLED.**—Large variety, forming a great mass of beautiful leaves, which are ruffled and finely curled on the edges; hardy, vigorous, highly recommended. Pkt. 5c; oz. 15c; 4 oz. 35c; lb. \$1.00

## Ostrich Plume

Leaves dark green, beautifully curled and plume-like. Very vigorous and productive, stands well. Of distinctive flavor; superior to spinach for greens and excellent for salad.

Pkt. 10c; oz. 20c; 4 oz. 60c; lb. \$1.50

**White English.**—Light green variety; tender leaves; seed light yellow.

Pkt. 5c; oz. 15c; 4 oz. 40c; lb. \$1.00

## MUSHROOM SPAWN

**LAMBERT'S PURE CULTURE SPAWN.**—Mushrooms may be grown in any place where conditions of temperature and moisture are favorable. A shed, cellar or cave may be utilized to advantage for this purpose. It is essential that the temperature be maintained from 53 to 60 degrees F., and that the moisture be properly regulated. Lambert's Pure Culture Spawn is far superior to the old-style varieties, and much better results can be obtained from its use. The bricks should be broken into pieces about two inches square and planted from 10 inches to a foot apart. Bricks weigh from 18 to 20 ounces. A brick will spawn 10 square feet of bed. With Lambert's Pure Culture Spawn it is impossible to raise poisonous mushrooms.

**DIRECT SPAWN.**—Latest and best. Mammoth White, Cream White or Bohemian Brown.

Price, per brick, not prepaid, 35c; 10 bricks \$3.00; add postage at rate of 1½ lbs. per brick. Write for quantity price.



## MUSKMELON

### NETTED ROCK OR ROCKY FORD

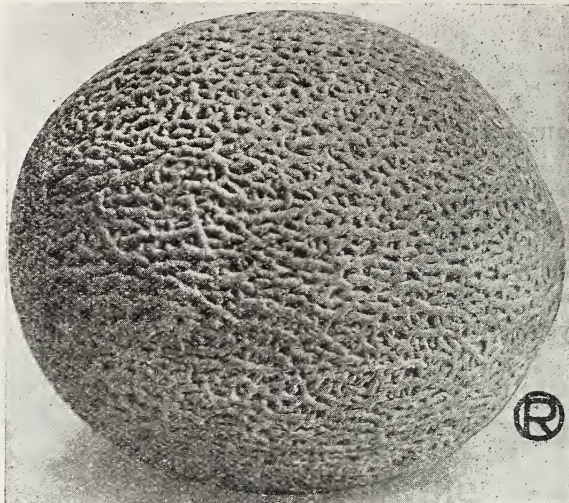
The most popular and best seller among Muskmelons.

The fruit is oval and completely covered with a beautiful lace-like netting. Flesh very thick; green, very sweet, luscious, melting and superb flavor. The fruit is wonderfully uniform in shape and quality. The favorite everywhere.

Pkt. 10c; oz. 20c; 4 oz. 50c; lb. \$1.50.

**BURRELL'S GEM** — Select Strain. — A new, medium-sized, oval variety, well ribbed and covered with a fine grayish netting and having reddish orange flesh of fine, spicy flavor, sweet and delicious, distinct flavor. There is a growing demand here for the fine-grained, smooth, salmon, red-fleshed Muskmelons.

Pkt. 10c; oz. 20c; 4 oz. 50c; lb. \$1.50.



Netted Rock—Rocky Ford

**THE HOODOO.**—One of the best of recent introductions. It is early and prolific. The fruit is of medium size, the seed cavity very small, the rind very thin, indeed, and the edible fleshy part thick and meaty. It is of orange or salmon color, the type much preferred now; but its great charm is its flavor, which is par excellence. Test it.

Pkt. 10c; oz. 25c; 4 oz. 60c; lb. \$2.00

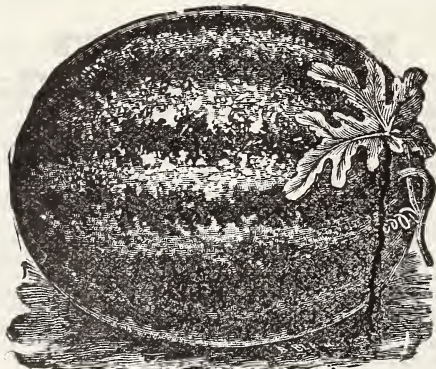
**MONTREAL IMPROVED NUTMEG.**—Valued for its size and delicious flavor. Round in shape, with remarkably thick green flesh. One of our handsomest varieties.

Pkt. 5c; oz. 15c; 4 oz. 40c; lb. \$1.25

**OSAGE, OR MILLER'S CREAM.**—Medium to large, flesh thick, deep salmon, of excellent quality, rich and sweet; skin dark green, slightly netted and ribbed. A favorite variety for the later markets.

Pkt. 10c; oz. 20c; 4 oz. 50c; lb. \$1.50

## WATERMELON



Routledge's Oregon Prize

**Citron, Red Seeded.**—Flesh white and solid, used exclusively for pickles and preserves.

Pkt. 10c; oz. 25c; 4 oz. 50c

Colton, Oregon, March 8, 1918.

Routledge Seed & Floral Co.,

Dear Sirs: Enclosed please find an order for seed. Have used your seed for several years and would feel lost if I couldn't get more, as they have always proven very satisfactory. Tried the pole Lima Beans last year and they did so well will have my own seed this year from them besides what I use on the table.

Respectfully,

MRS. S. A. COBB.

### Golden Beauty Cassaba

Fall and Winter Muskmelons

Skin wrinkled, flesh thick, excellent flavor and fine aroma. When nearly ripe pick and stow away in a cool, dark place until the rind becomes slightly softened and moist. Melons will actually keep until February. Pkt. 10c; oz. 20c; 4 oz. 60c; lb. \$2.00

### ROUTLEDGE'S OREGON PRIZE

We offer this new Melon with the assurance that it is not only remarkably early, but as sweet, delicate and melting in flavor as any variety grown.

The flesh is of a deep scarlet; rind thin, and on this account is not a particularly good shipping sort, but is emphatically the variety for home use and sale. It will ripen in altitudes where it has not been thought possible to mature a good watermelon.

Pkt. 10c; oz. 20c; ¼ lb. 50c; lb. \$1.50

**COLE'S EARLY.**—One of the best early sorts; medium size, green skin and red flesh. Pkt. 5c; oz. 10c; 4 oz. 35c; lb. \$1.25

### KLECKLEY'S SWEET

Unsurpassed for home use or near markets. Vine vigorous and productive; fruit of medium size, oval; color dark green; flesh very bright, rich red and exceedingly sweet.

Pkt. 5c; oz. 15c; 4 oz. 35c; lb. \$1.10



**"Highest Quality"****GARDEN PEAS****Hand Picked**

There is a vast difference in "strains" of garden peas. You will find our stock "very superior," healthy, vigorous and true, much better than the average seed sold by wholesale seed dealers and jobbers. Try them if you want "Highest Quality."

Packet and single pound prices only are prepaid. Add postage to 10-lb. prices if wanted by mail. **WRITE FOR QUANTITY PRICES**, but 1918 crop of new pea seeds was very short.

**ALASKA.**—An extra early, exceedingly hardy pea. Pods of perfect shape, well filled with smooth peas of unrivaled quality. Height 2½ feet. Can be planted much earlier than wrinkled peas.

Large pkt. 15c; lb. 35c; 10 lbs. \$3.00

**AMERICAN WONDER.**—Well known and very popular; extra early, productive and good flavor; grows 10 inches high.

Pkt. 15c; lb. 40c; 10 lbs. \$3.25

**Duke's Delight**

A very dwarf, extra early delicious pea of great merit.

Our regular customers are now demanding it in preference to American Wonder, Notts and Gem varieties.

**Duke's Delight** easily outclasses these old popular kinds in **productiveness, size and fullness of pods, color, sweetness and flavor.** The sturdy, stocky, healthy vines grow about 12 to 14 inches high. **Every grower praises it.** Read reports, we receive many like them.

Large pkt. 15c; lb. 45c; 10 lbs. \$3.50

**About "Duke's Delight" and "Duke"**

Our "Duke," who is the youngest of the four Routledge Bros., is "Somewhere in France" with the U. S. A. "Yanks." It will be "Duke's Delight" to get back in the store where we all miss him so much. He was manager of our retail department, and Duke to everyone.

The wonderful new pea described above, "that you all like so well," was named after him. It is our most popular variety—no one ever gets enough of Duke's Delight or Duke. Here's "to his health," and that he may be with us by "planting time," at least by "harvest time."

**Reports**

Routledge Seed Co.:

We consider "Duke's Delight" the best Peas we have ever raised and have recommended them to all we know who have a garden.

Yours truly,

F. M. EDWARDS, Pendleton, Ore.

Gentlemen: My "Duke's Delight" Peas are simply delicious, and will surely want more next year!

Yours very sincerely,

EDW. ANDERSON, Kootenai, Idaho.

Gentlemen: Please send me p. d. q. some more of those "Duke's Delight" Peas. They are the best ever. Will have to dig up some other garden truck to make room for them, but they are worth it.

Yours very truly,

C. O. RICE, Salem, Ore.

Gentlemen: The "Duke's Delight" Peas are the best I ever used. My second crop came on in September.

Yours truly,

E. E. SEARLES, Everett, Wash.

Be sure you read about Mulford's Culture for inoculating pea seed. Increases the yield and improves the soil. (See page 41.) Plant extra early, early and late varieties all at same time for a succession of prime pods.



**Duke's Delight.**

**R. R.'s Prosperity**

The Earliest Large Podded, Sweet Garden Pea to date.

It is hardy and can be planted fully as early as Alaska.

This grand, large podded, extremely early, prolific variety, is vigorous and robust; height 3½ to 4 feet; only a few days later than the earliest smooth sorts.

The pods are very large, and are invariably well filled with from 8 to 10 sweet, luscious, tender, wrinkled peas of large size and delicious flavor.

The peas remain tender and sweet for some time after they are large enough to use. Its heavy yield and excellent quality makes it a most profitable market variety.

Large pkt. 15c; lb. 45c; 10 lbs. \$3.50. (See illustration, page 26.)

**Routledge Prize**

Largest pods, sweetest peas, most productive main crop variety. **SEE PAGE 27.**

**GOOD LUCK—Te-a-wha**

You will certainly be delighted with this new variety. Sturdy, dark green vines, 2 feet high, covered with large pods containing 9 to 11 superb flavored peas that retain their color and flavor longer than most kinds. Ten days later than Duke's Delight. Excellent for the home or market gardens.

Large pkt. 15c; lb. 40c; 10 lbs. \$3.25



## Highest Quality Garden Peas—Continued

### DON'T

Practice false economy by buying low-priced seeds. New-crop pea seeds are the shortest ever known this year. Low prices means old seed. Be careful.

### BURPEE'S "BLUE BANTAM"

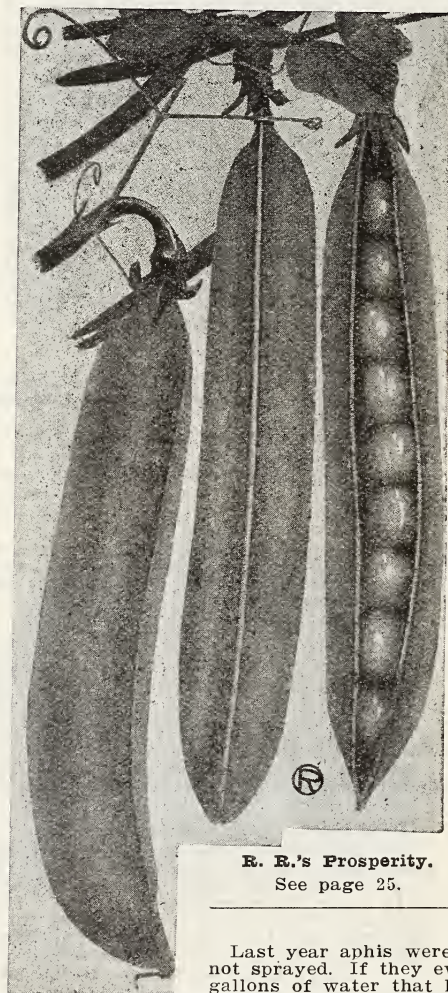
Unequaled for extreme earliness, superb quality, and unusual productiveness. The dwarf vigorous vines average 15 inches in height and carry really enormous crops of large, deep bluish-green pods. The handsome pointed pods average 4 inches long and are tightly packed with extra large, deep bluish-green peas of most luscious flavor.

Large pkt. 15c; 1b. 45c; 10 lbs. \$3.50

### LITTLE MARVEL

An extremely valuable variety, especially suited to small home gardens, and early market. It matures very early and produces large crops. Vines 15 to 18 inches high. The pods are dark green, good size, produced in pairs and are closely filled with 6 to 7 peas of extra fine flavor.

Large pkt. 15c; 1b. 40c; 10 lbs. \$3.25



R. R.'s Prosperity.  
See page 25.

### SUTTON'S EXCELSIOR

This handsome wrinkled Pea is so hardy that it may safely be planted as early as Alaska. The plants are dwarf, sturdy, very stout, exceedingly productive and the "quality" is all that could be desired. The pods are large for so dwarf a variety and always well filled. Improvement over Notts Excelsior, Premium and Little Gem.

Large pkt. 15c; 1b. 45c; 10 lbs. \$3.25

### Richard Seddon

The pods are deep green, crowded with from 7 to 9 large peas of very fine color and flavor. An extremely early type, maturing only a week later than the Alaska, when sown at the same time. A splendid all-around early dwarf variety. On account of its immense productivity, evenness of maturity, compact well filled pods and excellent color and quality, it is especially desirable for canning purposes.

Large pkt. 15c; 1b. 40c; 10 lbs. \$3.25

### DWARF TELEPHONE—Daisy

A splendid mid-season variety, growing only about 18 inches in height; vines very stout and bear a good crop of large, well-filled, bright green pods. The pods average 5 inches in length, containing 7 to 9 large peas which are tender and sweet. A popular sort.

Large pkt. 15c; 1b. 40c; 10 lbs. \$3.00

### Gradus

Extra early. This popular large-podded wrinkled pea of finest quality matures pods only two or three days later than the small-podded round-seeded extra earlies. Vines four feet high. It produces uniformly large pods, measuring from four to four and a half inches in length, nearly round, and well filled with very large, handsome peas of the finest flavor.

Large pkt. 15c; 1b. 35c; 10 lbs. \$3.00

### IMPROVED STRATEGEM

A very productive semi-dwarf variety with large leaves and large pods. The peas are dark green, wrinkled, and large. It is planted in large quantities by gardeners for market. In quality it is unsurpassed, the peas when cooked being of the most delicious sweetness.

Large pkt. 15c; 1b. 35c; 10 lbs. \$2.75

### DWARF SUGAR—EDIBLE PODS

A great favorite with many. In the Edible-Podded or Sugar Peas the pods are gathered, broken and cooked like string-beans when the peas start to develop in the pod or have reached about half their full size. Dwarf Sugar grows about 2 feet in height, producing a heavy crop of small flat pods about 3 inches in length.

Large pkt. 15c; 1b. 45c; 10 lbs. \$3.50

### APHIS ON PEAS

Last year aphid were very bad and destroyed many peas that were not sprayed. If they ever get bad again, use 1 oz. Blackleaf "40" to 5 gallons of water that has been made "soapy" with 1/2-lb. bar of Fish Oil Soap. Apply with a force sprayer. See pages 124 to 128.

Market Gardeners who buy Peas in quantity should write us for prices, stating variety and amount wanted. Single pound prices only are prepaid. See notes top of page 25.



**Peas—Continued—Large Podded, Late or Main Crop**

Packet and single pound prices only postpaid. Prices higher, short crop

**Routledge Prize**

A new, sweet, wrinkled, mammoth podded Pea of extra value.

This re-selected new strain, grown especially for us in New Zealand, will be found true to name. A sturdy, healthy grower. Vines and pods are a deep, rich green. A bushel of **Routledge Prize** pods will shell out nearly twice as many peas as a bushel of Telephone. The vines are enormously productive, being completely covered with immense long pods, well filled with from 8 to 11 large peas of the **richest flavor**. This variety grows about 4 feet high and as an abundant cropper is superior to all other sorts.

Nothing in the line of peas excels the **Routledge Prize** in **richness, sweetness and flavor**. We are sure our customers will agree with us after testing this new pea. Try them and report results if you will.

Large pkt. 15c; lb. 45c; 10 lbs. \$3.75.

Gaston, Ore.,

Routledge Seed & Floral Co.,

Dear Sirs: **Routledge's Prize** Peas sure were fine; never saw Peas bear so and the pods were full of large, fine-flavored peas.

We must have some more of those Peas.

Yours truly,

W. W. EARL.

**Telephone**

One of the most popular and largest peas we have. Vines attain a height of 4½ feet, bearing profusely the extra long, handsome pods; tender, sweet and superb flavor. We offer a very carefully rogued, select strain of unusual merit.

Large pkt. 15c; lb. 40c; 10 lbs. \$3.00.

**A Good Book****HOME VEGETABLE GARDEN**, by Adolph Kruhm. This

is a practical and suggestive guide for the man who wants to raise his own vegetables. Written by a practical gardener of long experience. Every phase of garden-making is con-

sidered. It is a book for the beginner and the small home gardener particularly. Illustrated, 5x7 inches, 100 pages. Cloth cover.

Postpaid \$1.25

**PARSLEY**

**CHAMPION MOSS CURLED.**—An English strain, with beautiful moss-curl foliage; vigorous grower.

Pkt. 10c; oz. 20c; 4 oz. 50c; lb. \$1.50

**ARLINGTON EXTRA CURLED.**—Very choice strain, having the greatest possible curl to the leaves and the darkest green color; a very vigorous grower; will stand heat and drought better than any other.

Pkt. 10c; oz. 20c; 4 oz. 50c; lb. \$1.50

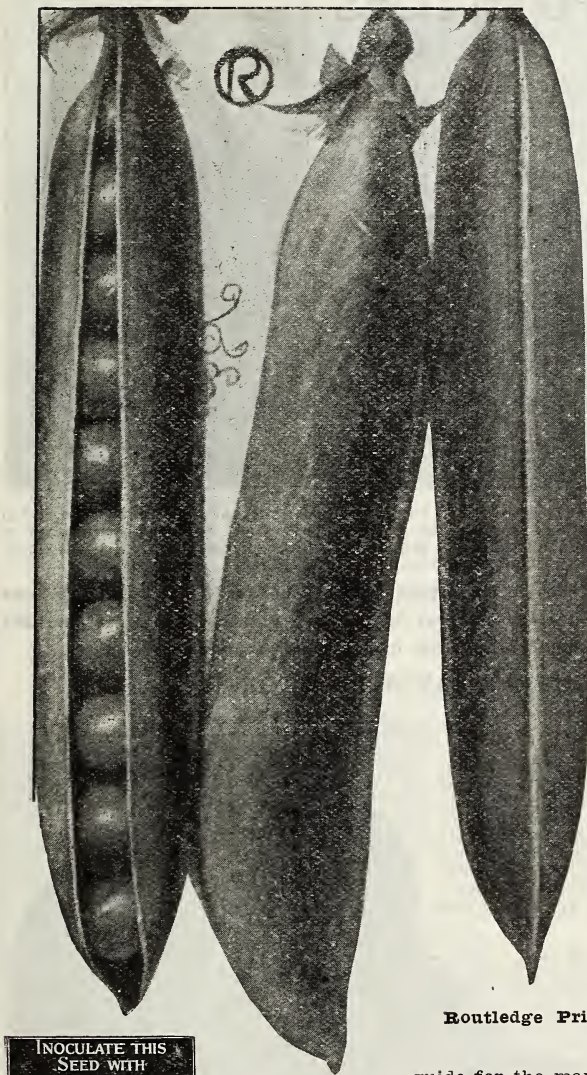
**PLAIN LEAF.**—Single-leaved variety, very fine and excellent flavor.

Pkt. 5c; oz. 15c; 4 oz. 35c; lb. \$1.00



Parsley Leaf.

Remember, a little extra cost at planting time will bring "dollars" or greater satisfaction at harvest time. Packet and single pound prices only prepaid. Write for quantity price.



Routledge Prize.

See Page 41.

INOCULATE THIS  
SEED WITH  
**MULFORD CULTURE**



## Routledge Seed & Floral Co.'s

# PURE SEED POTATOES

We offer a few varieties of special merit that we recommend to our friends and customers. We think it is folly to plant ordinary or common stock. Many gardeners insist on the **best vegetable seeds**, but plant any old kind of potatoes bought from their groceryman or taken from their supply of "eating stock," without even knowing whether they are early or late. Buy our pedigreed select seed potatoes this year and secure a real crop.



Digging and inspecting a 40-acre field of our "Pride of Multnomah." Illustration from photographs made by the writer. Considering the season, this field certainly produced a phenomenal yield of 95 per cent select, salable potatoes. This proves that hill-selected, disease-free, improved potatoes are the only profitable kind to plant.

**ABOUT PRICES.**—Prices are subject to important market changes. Ask for quotations on larger lots. Good, true, healthy stock of the best named Seed Potatoes are never plentiful and are always in demand. Order early and get our own contract-inspected stock.

### TWO EXTREMELY EARLY POTATOES

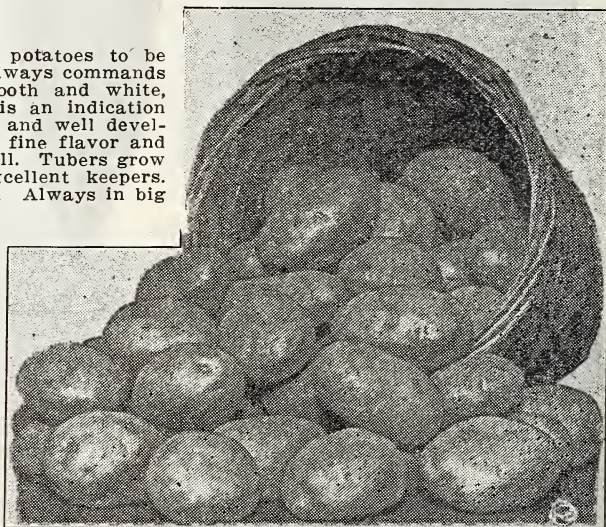
#### Irish Cobbler

One of the first varieties of potatoes to be ready for market, and therefore always commands a good price. The skin is smooth and white, sometimes finely netted, which is an indication of good quality; eyes are strong and well developed. The flesh is white and of fine flavor and quality, even when used very small. Tubers grow to good size very quickly. Excellent keepers. Vines sturdy, stocky and healthy. Always in big demand. Can be planted close.

Price, not prepaid; add postage if wanted by mail: 1 lb. 10c; 5 lbs. 35c; 10 lbs. 60c; 50 lbs. \$2.50; 100 lbs. \$4.00.

#### "Earliest of All"

Its quick growth and early maturity, combined with its excellent cooking qualities makes it very valuable. Summer drought does not affect it, for its growth is complete before it can be injured. Plant early to obtain large size. Ready for the table nine weeks from planting, and fully matured in 12 weeks.



Irish Cobbler, Extra Quality

"Earliest of All" is a healthy, vigorous grower, not subject to blight or disease and does not make a second growth. Keeps as well as any late potato. A handsome, shallow-eyed, round, slightly flattened, white-skinned potato of the finest table quality. Price, not prepaid, add postage if wanted by mail: Lb. 10c; 5 lbs. 35c; 10 lbs. 60c; 50 lbs. \$2.50; 100 lbs. \$4.00.

**NOTE**—We planted Earliest of All quite late last spring and the tubers are small on account of the dry summer—we have 2 grades: small—1 to 2 ozs., excellent for planting whole, and medium—2-ounce up. If you have a choice state it when ordering.



**PRICES.**—All potato prices are subject to change without notice. Write for prices, stating quantity wanted, when ready to buy.

## Sweet

### Potato

#### Plants

These are ready  
in May and June.  
See page 37.



We are proud of  
our strain of **Pride**  
of Multnomah.

"Pride of Multnomah" raised from our "hill-selected," pedigree stock. Ideal in shape, heavy and solid; free from all disease. The \$ size circle gives comparative size. **This stock is worth \$5.00 a sack for seed purposes.** Get a start. Order early and be sure.

## Early Rose

A great favorite for many years on all markets and many growers still claim that the **true stock** has never been excelled in quality and productiveness. Potatoes are long in shape, good size, showing trace of pink at the bud end. They cook mealy and are of fine flavor.

**Prices, not prepaid, 5 lbs. 30c; 10 lbs. 50c; 50 lbs. \$2.25; 100 lbs. \$3.50; quantity prices on request.**

## British Queen

A new English variety of **real merit**. Its great productiveness, large size, excellent quality, health and vigor puts it at "**the top**" as a **fancy table and shipping potato**. The past season it made a wonderful showing. Tubers oblong, slightly flattened, with white, smooth skin, shallow eyes. A **profitable main crop variety you should try**. Stock limited—order early.

**Prices, not prepaid, 1 lb. 10c; 5 lbs. 30c; 10 lbs. 50c; 50 lbs. \$2.25; 100 lbs. \$3.50.**

## White Rose

A standard market potato. In great demand by California buyers. Tubers flattened, oval, rather elongated, having few eyes and a beautiful, creamy-white skin. As an exhibition variety, White Rose has won many honors at State Fairs. A **heavy producer of fine, large potatoes** (very few small ones). It makes a vigorous, rapid growth and can be used quite early.

**Prices, not prepaid, 1 lb. 10c; 5 lbs. 30c; 10 lbs. 50c; 50 lbs. \$2.25; 100 lbs. \$3.50.**

## American Wonder

One of the best all-around white potatoes, very popular for early main crop. A strong grower and a great producer; tubers white, uniform in size, elongated, of excellent quality.

**Price, not prepaid: 5 lbs. 30c; 10 lbs. 50c; 50 lbs. \$2.25; 100 lbs. \$3.25; quantity price on request.**

**TELL US WHAT SIZE**—We have most of our seed potatoes graded into 2 sizes, small to medium and medium to large. If you have a choice, tell us when you order.

**IT PAYS TO USE "WONDER" FERTILIZER.**—W. L. Richards reports a crop of 422 lbs. of large, choice potatoes from a 100-foot row where he used "**WONDER FERTILIZER**," and only 138 lbs. of small "spuds" where "**Wonder**" **WAS NOT USED**. Soil and growing conditions the same. Note—He brought samples to our store.

## Pride of Multnomah

**Our leading main crop variety; has no equal as a profitable commercial variety.**

This potato, originating in Multnomah County, has made a record for itself, and is in great demand.

It is the **heaviest yielding**, most even growing **main crop variety**. The skin is smooth and white, eyes shallow, and **cooking qualities unexcelled**, being fine grained and of snowy whiteness either boiled or baked. Withstands drought better than most varieties. We offer hand-selected stock from our expert grower. (See illustration.)

The original stock of Multnomah, we thought, had a tendency to grow too long and pointed, and we have hill-selected to get a shorter, thicker, heavier type that ships and handles better, the "**Ideal Type**" that brings the "**fancy prices**."

**Price, not prepaid, add postage if wanted by parcel post, 5 lbs. 30c; 10 lbs. 50c; 50 lbs. \$2.25; 100 lbs. \$3.50. Do you prefer large or medium seed stock?**

## Producer

A large, smooth, oval, white potato with shallow eyes, of finest table quality; will not "boil to pieces," and baked has no superior; it is a hardy, vigorous grower that earned its name of "**Producer**" on account of its enormous and never-failing yield.

"**Producer**" always gives a big crop even under adverse conditions. "**Producer**" has been such a success that we consider it a valuable sort—especially for dry or light soil, as it will give a good yield where other varieties would fail.

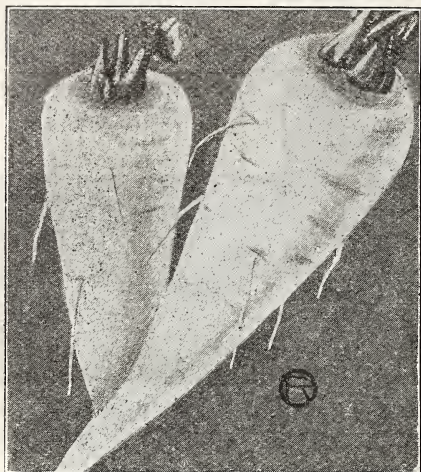
**Price, not prepaid, add postage if wanted by parcel post, 5 lbs. 30c; 10 lbs. 60c; 50 lbs. \$2.25; 100 lbs. \$3.25.**

## Burbank

A standard commercial variety, but most stock is "run-out." We offer **hand selected stock** that will yield much heavier than most.

**Prices, not prepaid: 5 lbs. 30c; 10 lbs. 50c; 100 lbs. \$3.25; quantity price on request.**





Sweet Marrow Parsnips.

## PEPPER

Plant seed early in the spring; culture same as for tomatoes. Plants in season. See **Vegetable Plant List**, page 37.

### Royal King

An ideal market variety, bringing the highest prices on account of its shape, color and thick meat, which is as thick again as any other large Bell type. It is perfectly sweet and free from pungency. A heavy cropper and a good shipper. Ruby red when ripe.

**Pkt. 15c; oz. 75c; 4-oz. \$2.50**

### Pimiento—Perfection

This is a sweet Pepper—one which you will enjoy eating in salad, either fresh or canned. Gardeners are planting Pimiento largely. Quite large, top shaped, very thick flesh and wonderful mild flavor.

**Pkt. 15c; oz. 75c**

### Chinese Giant

The largest of all the peppers, very sweet and mild. Brilliant, glossy scarlet when ripe. Excellent for stuffing. **Pkt. 15c; oz. \$1.00**

**RUBY KING.**—Plants grow 2 feet high and bear a fine crop of handsome, extra large, scarlet fruits. The flesh is quite thick, sweet, and mild. Especially fine for man-goes.

**Pkt. 15c; oz. 75c**

**LARGE BELL OR BULL NOSE.**—The plants are vigorous, compact and very productive, early and mild, fruit large, bright crimson when ripe.

**Pkt. 10c; oz. 75c**

**RED CHILL.**—A small, pointed, bright red variety. The pods are used in making chill and pepper sauce, and are very pungent and hot; very productive.

**Pkt. 10c; oz. 75c**

**CAYENNE.**—Long, red, pointed pods; very strong and used largely for making pepper sauce; popular variety.

**Pkt. 10c; oz. 75c**

**CHERRY RED.**—Rich, glossy, scarlet fruit at maturity; small, smooth and round; of dwarf habit.

**Pkt. 10c; oz. 75c**

## PARSNIP

While highly appreciated for the table the great value of the parsnip for stock feeding is but little known. The roots are very rich in saccharine food, adding to the richness of the milk when freshly dug and fed to cows.

**Culture.**—Sow as early in the spring as the weather will admit in drills 18 inches apart and  $\frac{1}{2}$ -inch deep, in a rich, deep soil; thin out 3 to 6 inches apart in the rows. The quality of the roots is improved by leaving them in the ground over winter for spring use.

### Sweet Marrow

This fine new parsnip of English origin is offered with full confidence that it will become a prime favorite with all who use it. It is very fine grained and exceedingly sweet, while the peculiar "parsnip" flavor is fully preserved. The roots are unusually smooth and attractive in appearance. The best of all parsnips for the private or market gardens.

**Pkt. 10c; oz. 20c; 4 oz. 60c; lb. \$1.75**

**HOLLOW CROWN.**—The most popular variety; medium length roots, very smooth and of the finest quality. Derives its name from a depression at top of crown or root; very fine table sort.

**Pkt. 10c; oz. 20c; 4 oz. 50c; lb. \$1.50**

## PEANUTS

As we have had many calls for peanuts for planting and know that they do fairly well in the Northwest, we offer two good kinds.

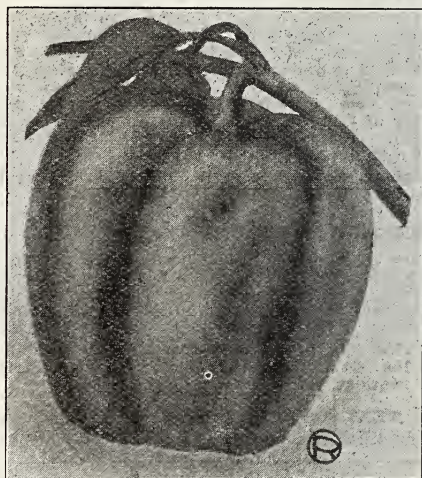
**Culture.**—Remove the shell carefully so as not to break the skin and plant 10 inches apart in rows, cover 2 inches. Warm, sandy, rich loam soil is best. When grown, pull up and dry in the sun.

**IVERSON'S IMPROVED.**—Early, large and productive, yielding few imperfect pods and less "pops" than any other sort.

**Pkt. 10c; lb. 55c**

**EARLY SPANISH.**—Although small, this variety is especially adapted to the north. Yields heavily, pods solid and unusually well filled. Sweeter and more delicious than the larger varieties.

**Pkt. 10c; lb. 55c**



Royal King Pepper.

**POSTPAID.**—All seeds in packets and single pounds are postpaid. You can't afford to send East. We save you time and money.



## PUMPKIN

**DOUBLE THE YIELD AND SIZE OF YOUR PUMPKINS** by using a handful of "WONDER" Fertilizer to each hill and be sure you mix it well with top soil. (See page 38.)

### WINTER LUXURY

An enormously productive variety of medium size and superior keeping qualities. Of rounding shape, about 10 inches in diameter; golden russet color, finely netted, rich deep golden flesh; sweet and tender. **By far the best for pies; try it.**

Pkt. 10c; oz. 20c; 4 oz. 50c; lb. \$1.50

### SMALL SUGAR

Fine grained, very sweet and excellent keeper. Skin deep orange yellow.

Pkt. 10c; oz. 20c; 4 oz. 50c; lb. \$1.40

### KING OF MAMMOTHS

The largest of all; grow this variety to win the prizes at the fair.

Pkt. 10c; oz. 20c; 4 oz. 50c; lb. \$1.50

### CONNECTICUT FIELD

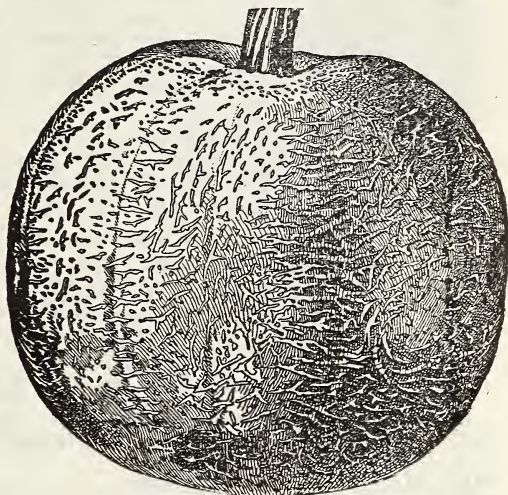
The best for field culture and excellent for stock.

Pkt. 5c; oz. 15c; 4 oz. 35c; lb. \$1.00

### LARGE SWEET CHEESE

A popular variety; fruit flattened; skin mottled light green and yellow; flesh yellow, thick and tender; very nutritious and of excellent quality; a most productive variety.

Pkt. 5c; oz. 15c; 4 oz. 40c; lb. \$1.25



Winter Luxury Pumpkin

"Highest  
Quality"

## RADISH

"Highest  
Quality"

**REMEMBER**—For a continuous supply of crisp, tender Radishes, sow seed every week, as they remain in "prime" condition only a few days after attaining full size.



### R. R.'s Scarlet Gem

This splendid radish is the very finest early strain of the round, bright red radishes. No other can surpass its table excellence or its beauty. The skin is bright scarlet, flesh pure white, crisp, tender and of delicious quality.

Pkt. 10c; oz. 20c; 4 oz. 50c; lb. \$1.50

### Scarlet Turnip, White Tipped (No. 5)

A beautiful variety, deep scarlet with white tip. Very early, crisp and delicious. It is most attractive in appearance and cannot fail to give satisfaction; very popular as a market sort; very select strain.

Pkt. 5c; oz. 15c; 4 oz. 50c; lb. \$1.25

### Early Scarlet Turnip

Small top; of quick growth; mild and crisp. Very popular.

Pkt. 10c; oz. 20c; 4 oz. 50c; lb. \$1.25

### French Breakfast (No. 7)

Very popular, crisp, tender and mild; grows about 2 inches long, stump rooted, tipped white.

Pkt. 5c; oz. 15c; 4 oz. 40c; lb. \$1.25

**DON'T** grow WORM-EATEN Radishes. Use "CARCO"—New Discovery; see pg. 125



## RADISH—Continued

Take a liberal amount of our kiln-dried pulverized cow manure into your Radish bed if your soil is heavy. See page 125.

### Scarlet Giant (No. 6)

"Crimson Giant." The largest early scarlet turnip-shaped radish. The flesh is a sparkling white, solid, crisp, juicy and are of the mildest flavor. The bright, deep crimson color of the skin remains quite constant. Pkt. 10c; oz. 15c; 4 oz. 45c; lb. \$1.35

### White Icicle (No. 3)

This superb radish is pure white and most attractive. It is not only crisp and tender when young, but retains these qualities until the roots attain large size. It is ready for use almost as quickly as the early turnip-shaped sorts.

Pkt. 10c; oz. 15c; 4 oz. 40c; lb. \$1.50

**LONG BRIGHTEST SCARLET, WHITE TIPPED (No. 1).**—The brightest and hand-somest long scarlet radish known. Roots mature quickly and continue in good condition until full grown. Of excellent quality.

Pkt. 5c; oz. 15c; 4 oz. 35c; lb. \$1.25

### Early Snowball (No. 4)

**Model White Box.** A grand improvement on the White Box or White Turnip Radish; very early, of a clear white color, solid, juicy, crisp, tender and unsurpassed in flavor.

Pkt. 5c; oz. 15c; 4 oz. 35c; lb. \$1.25

### Long Scarlet (No. 2)

Grows perfectly straight and smooth, 6 to 7 inches in length. Skin scarlet, very thin; the flesh crisp, brittle and of delightful flavor; the finest long red radish.

Pkt. 5c; oz. 15c; 4 oz. 35c; lb. \$1.25

**WHITE STRASBURG.**—Even when comparatively small this variety is in good condition for use, and continues crisp and tender until matured, when the roots are 4 to 5 inches long and about 2 inches in diameter. This is considered one of the best large summer sorts.

Pkt. 5c; oz. 15c; 4 oz. 35c; lb. \$1.25

## Winter Radishes

The merits of Winter Radishes are little appreciated. These grow to large size and keep well for winter and spring use. Sow seed in July and August. Early planting is not advisable.

### NERIMA—Japanese Long White

A late fall and winter radish that has recently made its appearance on the Portland market and created much favorable comment. It grows from 12 to 30 inches long and about 2 inches in diameter. Skin white and smooth, flesh firm, crisp, tender and mild. Very popular and in good demand; keeps well all winter.

Pkt. 10c; oz. 20c; 4 oz. 60c; lb. \$2.00

**California Mammoth White.**—Also called Chinese White Winter or Celestial. A long, thick, stump rooted variety. Pure white. The flesh is tender and crisp, keeping well through the winter.

Pkt. 5c; oz. 15c; 4 oz. 40c; lb. \$1.50

**SAKURAJIMA.**—Japanese variety that grows to an immense size, almost globe shaped. The skin is smooth and white, and the flesh is always mild, crisp and tender.

Pkt. 10c; oz. 20c; 4 oz. 60c; lb. \$2.00

**China Rose.**—Bright rose color, flesh firm and piquant, largest at the bottom. One of the best. Pkt. 10c; oz. 15c; 4 oz. 40c; lb. \$1.50

**Long Black Spanish.**—Very popular; latest, as well as the hardiest. Roots of medium size, oblong, black.

Pkt. 5c; oz. 15c; 4 oz. 35c; lb. \$1.25

**Round Black Spanish.**—Three or four inches in diameter; flesh white; good keeper.

Pkt. 5c; oz. 15c; 4 oz. 35c; lb. \$1.25

## RHUBARB OR PIE PLANT

**BURBANK'S CRIMSON WINTER.**—The new variety, which has become very popular and profitable to the grower, has a delicious fruity flavor, is extremely hardy, very prolific and very quick growing. Produces good stems all winter and spring.

Pkt. 10c; oz. 80c; 4 oz. \$2.50

**VICTORIA, OR MAMMOTH.**—Very large; most popular variety.

Pkt. 5c; oz. 15c; 4 oz. 40c; lb. \$1.25

**RHUBARB ROOTS.**—From October to June we can always supply one, two, and often larger clumps of Rhubarb Roots. Customers will save much valuable time by ordering roots instead of seed. For prices, etc., see page 117.

## SUNFLOWER

### Large Russian

This has very large single heads borne at the top of a single unbranched stalk usually, and with much more and larger seed than the common sorts. It is used extensively for feeding poultry. The plant often grows 10 feet high. Sow seed as soon as ground is fit for planting corn, in rows 3 to 4 feet apart and 10 inches apart in row. Cultivate same as corn. When the seed is ripe and hard, cut off the heads and pile loosely in an airy dry place where they will soon cure so as to be threshed out and cleaned. This variety will yield 1000 pounds or more of seed per acre. Some species are planted largely in the flower garden for ornament. (See Flower Seeds under Helianthus.) Pkt. 5c; 1 oz. 10c; 4 oz. 20c; lb. 50c, postpaid; for larger quantities inquire for prices.

Remember  
"CARCO"  
keeps worms  
from Radishes.  
See Page 125.



Rhubarb.

**EVER USE A LANTERN?** If you do, investigate DAD'S ELECTRIC—always ready—no danger from fire; makes "night time a light time." See page 122.



## SALSIFY OR VEGETABLE OYSTER

One of the most desirable winter vegetables. The roots when cooked are very palatable and nutritious, and are served in a variety of ways. The flavor is similar to oysters. Salsify succeeds best in a light, well enriched soil, which should be stirred to a good depth. Coarse and fresh manure should be avoided, as it will surely cause the roots to grow uneven and ill-shaped. Sow early and quite deep, giving the general culture recommended for parsnip. The roots are perfectly hardy and may remain out all winter. Frost does not injure the roots; may be stored in a pit or in a very cool cellar.

### Mammoth Sandwich Island

This variety is large and strong growing with long, smooth, white, tapering roots, and is less liable to branch than the other sorts. It is invaluable for market gardeners' use. **Pkt. 10c; oz. 30c; 4 oz. 75c; lb. \$3.00.**

## SPINACH

Plant in the richest soil you have very early in the spring or not until fall for winter use, as it does not do well in hot weather. **Spinach seed very scarce.**

**IMPROVED THICK-LEAVED.**—A variety which grows very rapidly, forming a cluster of large, very thick, slightly wrinkled leaves of fine color and quality when cooked; best for market gardeners.

**Pkt. 10c; oz. 15c; 4 oz. 50c; lb. \$1.50**

**LONG STANDING.**—An improved variety of excellent quality for general use; slow going to seed. Remains in good condition longer than most. Dark rich green.

**Pkt. 10c; oz. 15c; 4 oz. 50c; lb. \$1.50**

**BLOOMSDALE SAVOY LEAVED.**—Very early; of upright growth; leaves broad and pointed, dark green, fine quality; grows quickly. Good for all seasons.

**Pkt. 10c; 4 oz. 50c; lb. \$1.50**

**PRICKLY WINTER.**—Very desirable; very hardy and easily grown; bears large, smooth broad pointed leaves. Color, bright green. A fine winter and spring variety.

**Pkt. 5c; oz. 15c; 4 oz. 40c; lb. \$1.25.**



Improved Thick Leaved.

## SQUASH

### Delicata Squash

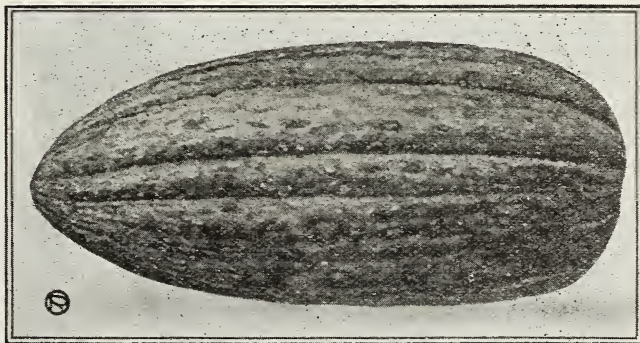
A perfect all-season squash. A summer and winter crop on one plant. Produces 15 to 20 fruits to a vine that are as deliciously flavored as the winter kinds.

Delicata grows in vine form. It is ready almost as soon as the early summer sorts, is better flavored than the best of them, and remains in perfect condition as long as any of the keeping varieties.

Its flavor when cooked has been compared to the Sweet Potato, others liken it to roasted chestnuts, but all agree that it is delicious. The fruits are about 9 inches long, and as shown in the cut, slightly ribbed. When ripe, the ground color is deep yellow, irregularly striped and marbled with dark olive-green.

The flesh is thick, of fine texture, and pale-yellow in color. It is unexcelled for baking—the shape and size make it perfect for this purpose. When boiled it turns out dry, mealy and sweet. Excellent for pies.

**Pkt. 10c; oz. 25c; 4 oz. 65c; lb. \$2.00**



Delicata Squash—Try It.

**FERTILIZE**—If you want large squash and lots of them. **SEE PG. 38-39.** Make liquid manure from "C-M" (pg. 38) and give each hill a quart or two occasionally during hot weather. The results will surely surprise you.



## SQUASH—Continued

### Mammoth White Bush Scallop

The fruit is a beautiful, clear, creamy white; superior in size and beauty, and is quite uniformly warted. The handsomest of the scalloped squashes. The stock we offer is exceptionally true to type. **Pkt. 10c; oz. 15c; 4 oz. 35c; lb. \$1.25**

### Golden Summer Crookneck

Early and prolific. The fruits are of the true crookneck type, heavily warted and of light golden color. One of the most popular sorts for home and market.

**Pkt. 10c; oz. 15c; 4 oz. 40c; lb. \$1.25**

**VEGETABLE MARROW.**—Long White Brush. A very popular sort abroad and can be raised equally well here. Is long and slim, color white, with delicious white flesh.

**Pkt. 5c; oz. 15c; 4 oz. 35c; lb. \$1.25**

**YELLOW BUSH SCALLOP.**—A very early, flat, scallop variety of large size; color yellow; flesh pale yellow and well flavored.

**Pkt. 5c; oz. 15c; 4 oz. 35c; lb. \$1.15**

## Fall and Winter Varieties

**BOSTON MARROW.**—A popular variety for canning; large oval fruit; skin bright reddish orange, with light cream netting; flesh rich orange, fine grained and of excellent quality.

**Pkt. 5c; oz. 15c; 4 oz. 35c; lb. \$1.25**

### Mammoth Chili

The largest of all squashes, growing to an enormous size, often weighing over 200 pounds, while its rich, fine flavored flesh insures its value for all purposes. Its size makes it valuable for stock feeding. **Pkt. 10c; oz. 20c; 4 oz. 45c; lb. \$1.75**

### Golden Hubbard

The same in size, shape and quality as the well-known Hubbard Squash, except that it is a bright red or golden color and somewhat earlier. It is also a long keeper; considered by expert judges to be one of the very best fall and winter sorts yet introduced. Matrices before the frosts; is vigorous and wonderfully productive. In flavor it has no equal. **Pkt. 10c; oz. 20c; 4 oz. 50c; lb. \$1.75**

### Delicious

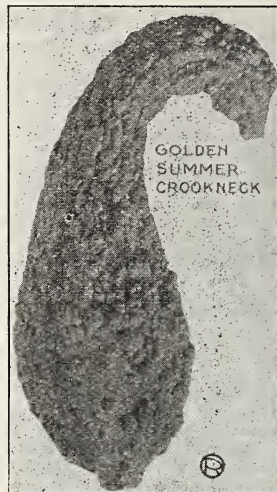
Finer-grained and more delicious than the well-known Hubbard. The color of skin is green or blue-black. Medium size, weighing from 5 to 10 pounds. The shell is not very thick, but is hard and strong; small

seed cavity; the flesh is very thick, of a bright yellow color, fine-grained and of splendid quality. For table use, either as a fall or winter squash, it cannot be excelled. **Pkt. 10c; oz. 20c; 4 oz. 50c; lb. \$1.50**

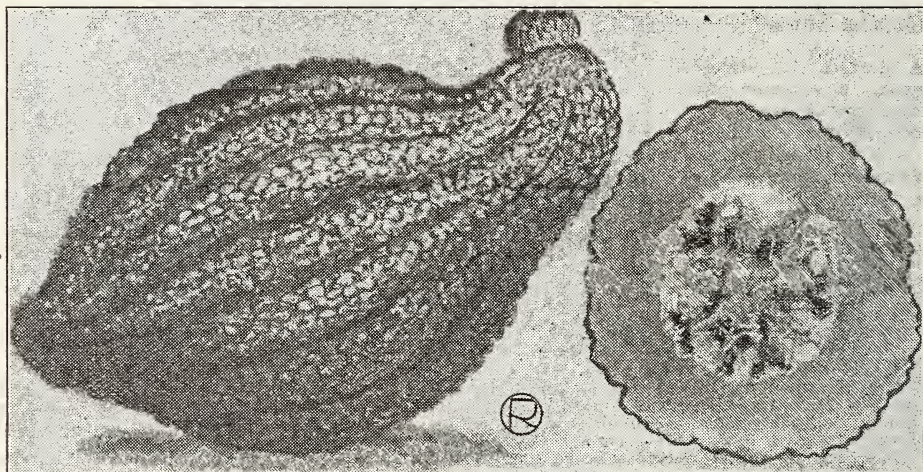
### True Hubbard

One of the best of the winter squashes. Vines vigorous and very productive. Fruit large, heavy, moderately warted, with very hard shell. Skin uniformly dark bronze green. Flesh bright orange yellow, fine grained, thick, dry and richly flavored. Can be kept in good condition until spring. Our seed is carefully selected and is much superior to most offered.

**Pkt. 10c; oz. 20c; 4 oz. 50c; lb. \$1.60**



See DAD'S  
ELECTRIC  
LANTERN,  
page 122.



**True Hubbard.**—Note the thickness of the flesh.

**DOUBLE** the yield of your squash by using a handful of "WONDER" Fertilizer to each hill. (See page 38.) You know the richer your ground, the larger the yield, and Wonder Fertilizer certainly contains more plant food than any other brand.



## TOMATO

Tomato Plants in any quantity. See Vegetable Plant list, page 37



### Comet

The Best Tomato for Green-house Forcing.—A recent variety, matchless in form and color. Beautiful, smooth, round fruit in great abundance. Color a rich scarlet red. Sets very freely in bunches. Equally good for outdoor culture as for forcing.

Pkt. 15c; ½ oz. 40c; oz. 75c

### Chalk's Early Jewel

The largest, smoothest and finest flavored, extra early bright red tomato, about 10 days later than Spark's Earliana. It is a heavy cropper with tomatoes of larger size, sweeter flavor, produced throughout the season. The plants are of bushy, compact growth, heavily loaded with fruit. The tomatoes are just right for market; very solid and deep through, being almost round; ripening to the stem without cracks or green core. The flesh is thick, solid, of fine flavor, with few seeds.

Pkt. 10c; oz. 40c; 4 oz. \$1.25

### Routledge's Early Oregon

Very hardy and succeeds everywhere. The Early Michigan, Fordhook and Atlantic Prize were good sorts "in their day," but the Early Oregon is superior to these in shapeliness, color, size, smoothness, solidity and flavor, as well as being earlier. Those wishing to have the earliest "GOOD" tomato should raise our Early Oregon. Highly recommended for the home or market gardener. Try it; you will not be disappointed.

Pkt. 10c; ½ oz. 25c; oz. 40c; 4 oz. \$1.25

### Spark's Earliana

The earliest tall variety, forming ripe fruit much earlier than most early varieties. The fruit is large, smooth, of a bright scarlet color and of fine quality. Very valuable for early market use.

Pkt. 10c; oz. 40c; 4 oz. \$1.25

### STONE

Grown very extensively for a main crop by market gardeners; very large, smooth and solid, of a bright red color and a heavy yielder; of excellent quality and not subject to rot.

Pkt. 10c; oz. 40c; 4 oz. \$1.20

**DWARF CHAMPION.**—Forms a strong, erect, bushy plant 2 feet high; often sold as Tree Tomato. Fruit smooth, medium sized, solid and of good flavor.

Pkt. 10c; oz. 40c; 4 oz. \$1.20

**YELLOW OR RED PEAR.**—Used for preserves and to make "tomato figs." Fruit distinctly pear shaped and of excellent flavor.

Pkt. 10c; oz. 50c

**RED OR YELLOW CHERRY.**—Fruit small, about ⅝-inch in diameter; perfectly round and smooth; fine for pickles and preserves.

Pkt. 10c; oz. 50c

### Bonny Best

Highly prized by many Oregon growers. Tomatoes large, smooth and of a rich scarlet red, the color that sells quickly. Fruit thick with a small core, a profitable tomato for any purpose. Slices exceptionally well. Flesh and flavor excellent. Nearly globe shaped, slightly flattened at stem. Borne in clusters of 5 or 6 fruits all ripening evenly together. Very productive and one of the very earliest.

Pkt. 10c; ½ oz. 25c; oz. 45c; 4 oz. \$1.25

**YELLOW HUSK OR GROUND CHERRY.**—used for preserves and eating from the hand. The seed we offer is that of the true Yellow Ground Cherry, not the purple-fruited sort, which is scarcely edible.

Pkt. 10c; oz. 50c

## TOBACCO

Culture practically same as cabbage.

**Havana or Connecticut Seed Leaf.**—Both good, hardy varieties for general planting here.

Pkt. 10c; oz. 50c

Increase the yield and quality of your Tomatoes by using a good plant food. See page 38. **WONDER ODORLESS FERTILIZER** will do it; a spoonful to a plant.



## TURNIPS OF "Highest Quality"

For spring use sow very early in rich, loose ground. They must make a quick growth to be tender and sweet. For fall and winter use sow in July, August or early September.

### Extra Early WHITE MILAN TURNIP The Very Earliest

An excellent table turnip, and the earliest of all varieties; adapted for very early spring or fall planting. The tops are small; the bulbs of medium size, flattened, and ivory-white in color. The flesh is fine-grained, tender, and of a mild, sweet flavor. It remains in good condition for a long period of time, and does not become pithy or stringy.

Pkt. 10c; oz. 25c; 2 oz. 45c; 4 oz. 75c; lb. \$2.25

### Orange Jelly, or Golden Ball

Delicate and sweet, yellow flesh, medium in size, firm, crisp and most excellent flavor; keeps well and is superior as a table variety.

Pkt. 10c; oz. 15c; 2 oz. 25c; 4 oz. 45c; lb. \$1.75

### Early White Flat Dutch

A leading white fleshed variety; either for the family, market garden or field crop; it is medium size and produces a large crop; the flesh is firm, but tender, and of a superior rich, buttery flavor; a good keeper.

Pkt. 10c; oz. 15c; 2 oz. 25c; 4 oz. 45c; lb. \$1.75

### Early Snowball

A superior table variety, meltingly tender, with snow-white flesh. Matures six weeks after sowing; medium size, smooth and perfectly globular.

Pkt. 10c; oz. 20c; 2 oz. 35c; 4 oz. 50c; lb. \$2.25

### White Egg

Is perfectly smooth, of a pure clear white; a very choice kind for table use; of excellent flavor, sweet and mild; pulls clean from the ground; thin, snow-white skin. Egg shaped.

Pkt. 10c; oz. 20c; 2 oz. 35c; 4 oz. 50c; lb. \$1.75

### EXTRA EARLY PURPLE TOP MILAN.—

This variety is ready for the table almost as early as white Milan; flesh white, firm and delicate.

Pkt. 10c; oz. 25c; 2 oz. 40c; 4 oz. 75c; lb. \$2.50

### NO MORE WORMY TURNIPS

A new and wonderfully successful spray for destroying maggots, grubs and worms which infest Turnips, Radishes, Beets, Rutabagas, Cauliflower, Cabbage, Onions, etc., and also recommended for combatting crown borers in Strawberries.

A marked increase in yield of vegetables follows the use of "Carco" spray. See page 125.

### Early Purple Top (Strap Leaved)

One of the best and universally grown; flesh firm, but very tender and sweet; of quick growth; attains large size, profitable for stock, keeps well.

Pkt. 10c; oz. 15c; 2 oz. 25c; 4 oz. 45c; lb. \$1.75

**PURPLE TOP WHITE GLOBE.**—A very heavy cropping, globe-shaped variety, with white skin and flesh, excellent flavor and much in favor with the market gardeners.

Pkt. 10c; oz. 20c; 2 oz. 35c; 4 oz. 75c; lb. \$2.40

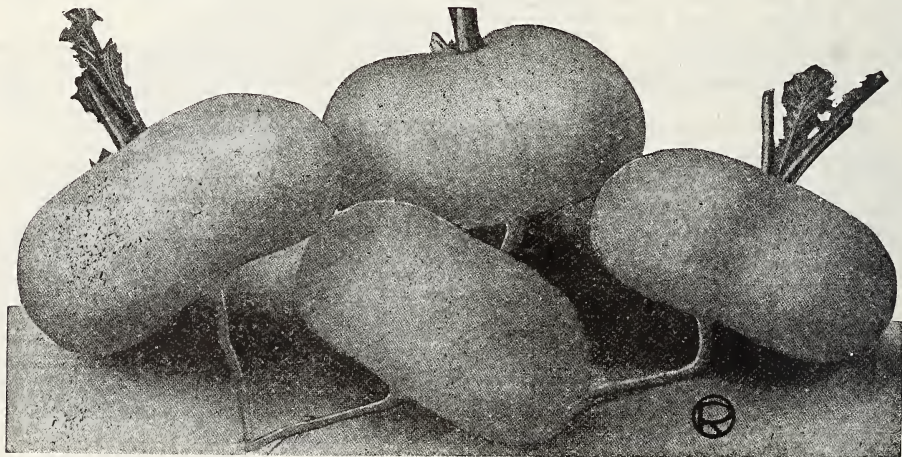
**YELLOW ABERDEEN.**—Round, medium size, light yellow; produces a large crop; is hardy and keeps well; flesh very firm, but tender and sweet; a great favorite with the dairymen for feeding cows.

Pkt. 5c; oz. 15c; 2 oz. 25c; 4 oz. 45c; lb. \$1.50

### Cowhorn (Long White)

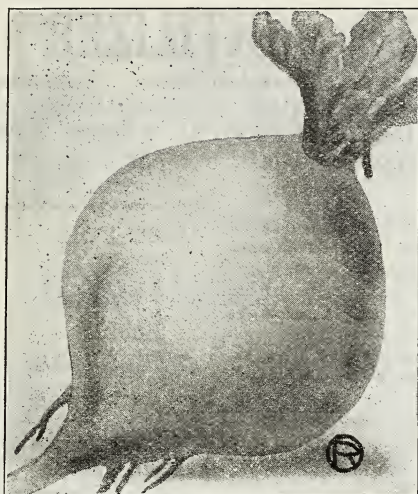
Slightly crooked, pure white, except a little shade of green at the top; grows half out of the ground and is of very rapid growth. Has proved itself one of the best stock turnips ever introduced in Oregon.

Pkt. 5c; oz. 15c; 2 oz. 25c; 4 oz. 45c; lb. \$2.25



Extra Early White Milan Turnips



**American Purple Top.****RUTABAGA OR SWEDES**

For feeding stock in fall and winter there is nothing superior to turnips and rutabagas, as they are much liked by all kinds of stock, and serve to keep them in good condition.

**IMPROVED AMERICAN PURPLE TOP.**

The leading and most popular variety, being very distinct in type, attaining a wonderfully large size; immense yielder; the flesh is very firm, cream yellow, fine grained, sweet and tender. Excellent both for table and stock feeding. Keep all winter.

**Pkt. 10c; oz. 20c; 2 oz. 35c; 4 oz. 60c; lb. \$2.00**

**WHITE SWEET RUSSIAN.**

This variety is most excellent either for table or stock; it grows to a very large size; flesh white, solid, of a firm texture, sweet and rich; an excellent keeper.

**Pkt. 10c; oz. 20c; 2 oz. 35c; 4 oz. 60c; lb. \$2.00**

**HERB SEEDS**

**Pot, Sweet and Medicinal**

Herbs in general delight in rich, mellow soil. Those marked with a (\*) are perennial.

**All the Following Herbs 5c per Packet, unless Otherwise Priced**

	Oz.		Oz.
<b>Anise.</b> —Seeds aromatic; used medically.....	20c	<b>*Horehound.</b> —Bitter; for tonic.....	Pkt. 10c 40c
<b>*Balm.</b> —For culinary purposes .....	35c	<b>*Hyssop</b> .....	35c
<b>Basil.</b> —Sweet; for flavoring soups.....	20c	<b>*Lavender.</b> —For fragrance ....	Pkt. 10c 35c
<b>Borage.</b> —For flavoring; also bee pasture.....	25c	<b>*Marjoram.</b> —Sweet; for flavoring .....	25c
<b>Caraway.</b> —For flavoring .....	25c	<b>*Rosemary.</b> —Aromatic oil.....	Pkt. 10c 75c
<b>*Catnip.</b> —Mild nervine.....	Pkt. 10c 85c	<b>Summer Savory.</b> —For flavoring .....	20c
<b>Coriander.</b> —Used for flavoring .....	20c	<b>*Sage.</b> —For tea flavoring and dressings.....	20c
<b>Dill.</b> —Used medicinally and for pickles.....	20c	<b>*Thyme</b> (broad leaf).—For soup.....	Pkt. 10c 50c
<b>*Fennel.</b> —Flavor of celery .....	20c	<b>*Wormwood.</b> —Medicinal use .....	25c

**VEGETABLE PLANTS**

We grow large quantities of choice vegetable plants, and can supply all of the varieties listed below, in their proper season, in most any quantity. We can supply all vegetable plants in two grades—plants direct from the seed beds and those that have been transplanted into shallow boxes. Transplanted plants are much stronger and better rooted, and are well worth the price, especially in the early part of the season. We can supply most any of the leading sorts. Tell us your choice of varieties, and we will send it or give good substitute. **NO PLANTS SENT C. O. D.** Write for prices on 5 to 10 thousand lots.

**NOTE.**—Dozen prices only are postpaid. We will send 100 and 1,000 lots by express at your expense, unless you wish to send 35c extra per hundred to pay packing and postage. **Tomatoes 50c per 100 extra.**—Pot-grown tomato plants should have all the dirt left on the roots and are not available.

**CABBAGE AND GARDEN KALE**

	Dozen	100	1000
Early kinds, transplanted \$	.25	\$1.00	\$3.00
Late, not transplanted....		.75	7.00
Stock kale .....		.75	6.00

**CAULIFLOWER AND BROCCOLI**

	Dozen	100	1000
Early Snowball St. Valentine			
Transplanted .....	.30	1.25	10.00
Late kinds, transplanted..	.30	1.00	8.50
Late, not transplanted ...		.75	7.50

**CELERY AND CELERIAC T. R.**

	Dozen	100	1000
Leading kinds, transplanted .....	.30	1.25	8.50
Not transplanted .....		1.00	7.50

Dozen 100 1000

**PEPPER AND BRUSSEL SPROUTS**

Transplanted ..... \$ .30 \$1.25 \$10.00

**SWEET POTATO PLANTS**

Sweet Potato Plants..... .35 1.25 9.00

**TOMATOES**

Leading kinds, our selection, transplanted .... .35 1.25 8.50  
Not transplanted ..... 1.00 7.50

**Pot Grown Tomato Plants.**—These large plants give the most profitable results. **Can not be mailed. Prices:** 3-in. pots, 15c each, \$1.50 doz.; 4-in. pots, 20c each, \$2.00 doz.; must go by express, charges collect.

**Chives (Schnittlauch).**—Per bunch, postpaid ..... 25c



# WONDER ODORLESS FERTILIZER

The best fertilizer for the city gardener; clean and odorless. Remember, it's **ALL FERTILIZER**; a wonder in action, a giant in strength, and the small amount necessary to use makes it the **CHEAPEST AND MOST EFFICIENT** High Grade Fertilizer on the market, and last, but not least, **IT IS ODORLESS**.

In "**WONDER**" you get the latest scientific discovery in plant food, something which gives results, something that astonishes. This "**WONDER**" fertilizer is the result of years of study and trials by a fertilizer expert. In "**WONDER**" we have a meritorious and **ODORLESS** concentrated fertilizer, put up in small packages, thereby making its distribution a cheap and easy matter. Being a concentrated fertilizer, only a very small amount is required to produce the largest yield. (See general directions below.) There's no use of your paying dray and freight charges on bulky fertilizers containing three-fourths sand, ash or dirt filler. "**WONDER**" is the pure "**DOPE**"—clean and easy to apply. We guarantee it to give results.

The small amount of "**WONDER**" required reduces the expense of fertilizing to about one-half the cost of manure or the average commercial fertilizers on the market. Rich in potash.

The "**WONDER**" Fertilizer is sold only in 25-lb. white, clean canvas bags, 2-lb. odorless cartons and 125-lb. sacks.

## Price of "Wonder" Fertilizer

TWO-LB. CANS, Not Postpaid, 40c (P. P. Wgt., 2½ lbs.)  
25-LB. DRILL BAG, \$2.65; 3 Bags, \$7.50; large 125-lb. sack,  
\$10.00.

**NOTE**.—If wanted by parcel-post add postage. "Wonder" is odorless and cans and 25-lb. bags can go by mail cheaper than express or freight in most cases.

## General Directions for Using Wonder

Remember a 25-lb. bag of "**WONDER**" is equal, in plant food, to 100 lbs. of most any other commercial fertilizer on the market.

**For Ferns, Palms and House Plants:** One-half teaspoonful to a 6-in. pot, dug into the top soil; 1 teaspoonful, heaping, when repotting, mix well through the soil.

**For Vegetables:** A teaspoonful to a Cabbage, Tomato, Cucumber, Pumpkin or Melon Vine. Sprinkle lightly, in the row, when planting Radish, Lettuce, Peas, etc., or hoe in the top soil after they are up. **For Flowers outside:** A very little to each plant, or dig into the top soil before or after planting. 1 lb. to 10 foot square.

**For the Lawn:** One 25-lb. bag of "**WONDER**" will go over a space of your lawn 50x50 or 2500 square feet, and is sufficient for same, applied once yearly. In dry weather always water after applying. Double the amount when making new lawns.

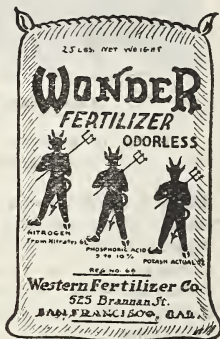
**For Fruit, Roses, Etc.:** A heaping tablespoonful for a small Fruit, Berry, or Rose Bush, a cupful for a 3 or 4-year tree; 1 to 3 lbs. to a full bearing Fruit Tree, large Flowering Shrub or Vine.

**CAUTION!** Always mix the fertilizer into the top soil as much as possible, and water or sprinkle after applying it, especially on grass or tender foliage or growth.

Ask for "**WONDER**" 20-PAGE BOOKLET that gives plain facts and full information and directions for all purposes. **FREE**.

**NOTE**.—Three sacks "C. M." and 1 25-lb. sack "Wonder" (see opposite page) mixed together will make a very rich combination fertilizer, that will prove highly satisfactory for all uses—as it would be very rich in plant food and supply the necessary humus for heavy soils.

ASK FOR  
24-Page  
"Wonder"  
Booklet.  
TELLS ALL



Junction City, Ore., June 12.

Routledge Seed & Floral Co.,

Gentlemen: I tried your "Wonder" fertilizer last year and find it has the right name. It was wonderful the difference there was between the vegetables where it was and was not used.

MRS. O. C. IVIE.

Hundreds of our  
customers say the  
same

You try it and be  
convinced. Your  
report, please





# Kiln-Dried Pulverized Cow Manure

For Short, We Call It "C. M."

Supplies the "Humus" lacking in chemical Fertilizers and the analysis shows it to be quite rich in nitrogen potash and phosphoric acid. It will not burn or harm the most tender seeds or plants.

This product is made of green cow manure by putting it through a dry-kiln with heat enough to evaporate the water and kill all weed seed without burning the compost or destroying the fertilizing elements. It is then ground finely and sacked.

Hundreds of our Gardeners and Farmers have discovered its great value, and are buying large quantities.

**EIGHT TO ONE.**—You can get a good idea of the value of this concentrated product when we state, that it takes 8 to 10 tons, in the green or natural state, to make 1 ton ready to sack. If you stop and think a minute, you will realize that we are really offering, in a most convenient dry state, a fertilizer and compost that heretofore you

have bought by the wagon load, in a most dirty, foul and disagreeable form.

**SUPPLIES THE HUMUS.**—This new product supplies all the humus and fertilizing value of the old form, without the disagreeable odor, coarse straw, chaff and weed seeds to get scattered over the garden or lawn. In fact you get everything in an ideal form except the live weed seed and moisture. You do not want the weeds and can easily apply water when needed. There is no use of paying dray, freight or handling charges for dirty, foul, water soaked manure when this product can be had.

**CHEAPER AND MORE CONVENIENT.**—The old form cow manure costs about \$3.00 a load delivered and about \$3.00 more to get it placed and spaded under. Three sacks of our Dry-Kiln C. M., which is practically odorless and can be spread around by anyone at leisure, will cost less and give better results.

## Uses and Directions for "C. M."

**FOR ROSE BEDS AND BORDERS  
FRUIT AND BERRY BUSHES  
GRAIN FIELDS AND MEADOWS**

Apply "C. M." broadcast at the rate of 10 to 20 sacks per acre. It will pay to use a ton per acre.

### FOR SEED BEDS

As a top dressing over seed beds, where small flower or vegetable seeds are to be started, nothing else could be better, as it is full of "humus" (like leaf-mold) which keeps the top soil loose and open. Rake "C. M." into the top soil or after seeding, sprinkle "C. M." over the surface.

### FOR VEGETABLES AND FLOWERS

Use "C. M." on any soil that needs loosening up and enriching. To raise choice vegetables and large beautiful flowers, the soil must be rich, well worked and loamy.

### FOR LAWNS

"C. M." is just what has been wanted for years by amateur and professional lawn-makers. Heretofore on account of heavy soils that would bake and crack, the best cow manure obtainable was used to open up and keep the soil loose. It was not the plant food needed, as that could easily be applied in the form of Chemical Fertilizer, but it was the "humus" in the stable manure that was wanted, but NOW with this Dry-Kiln, weed free, "C. M." the lawn-maker's troubles are greatly reduced.

**HOW TO USE.**—After the lawn has been graded, raked, seeded and rolled, spread "C. M." broadcast over the seed, covering it well. If it is dry weather, sprinkle, but sprinkle lightly so as not to wash it off until it has settled, after it is once wet it becomes part of the surface soil and will remain.

**ANOTHER WAY.**—Providing you will use "C. M." in a liberal amount it would be better raked into the surface soil, then seed, rake lightly and roll.

## PRICES OF DRY-KILN "C. M." AT OUR STORE

Large Sks., \$2.00; 3 Sks., \$5.50; 5 Sks., \$9.00; 10 Sks., \$17.50; 20 Sks., \$32.50; small lots—2 Lbs., 15c; 5 Lbs., 25c; 10 Lbs., 40c; 35 Lbs., \$1.00.

**NOTE.**—Delivery charges on Fertilizers to depot, 25c per 100 lbs. and 10c additional for each 100 lbs.

With our new fertilizer Dry-Kiln "C. M." to supply humus, and "Wonder" the strongest and richest odorless chemical fertilizer and "Ground Lime," the great soil conditioner, we have a combination that will supply every need. (See opposite side.)

The day of strong smelling, odorous fertilizers is over, we believe, at least for the city and suburban gardener.

**For Liquid Manure.**—Empty half a sack of "C. M." into a 50 gal. barrel and fill with water. Use this liquid straight or diluted form, for watering. The increased vigor and growth of plants will almost immediately be noticed.



## Fertilizers—Continued

Fertilizer prices subject to market changes. Write for quantity price.

### Winner Brand X Complete Fertilizer

A complete and perfectly balanced fertilizer for vegetables, grass, grains and fruit. The body is ground sheep manure mixed with other fertilizer ingredients. Analysis: Nitrogen 2.04%, phosphoric acid 5.90%, potash 2.40%. **Prices: Per sack (90 to 100 lbs.) \$3.50; 3 sacks \$10.00; 5 sacks \$16.50; 20 sacks \$65.00; small lots, 4 lbs. 25c; 10 lbs. 50c; 30 lbs. \$1.25. Delivery charges extra.**

### SHEEP GUANO—PULVERIZED

For Lawns and Garden Work.

We can supply this to those who order it, but we like "C-M" better. (See pg. 39.)

**Prices: 100-lb. bag \$2.25; ton \$45.00.**

**HIGH-GRADE BONE MEAL.**—This is finely ground and of best quality. Used for Lawns, Roses, Shrubs and Trees. Not very quick in action and should be applied in the fall or very early spring. Use 1000 to 2000 lbs. per acre.

**Prices: 5 lbs. 30c; 10 lbs. 50c; 50 lbs. \$2.00; 100 lbs. \$3.50.**

**FERTILIME (Hydrated fertilizer lime).**—

The best grade, ground very fine; more than worth the higher price. Not sold in less than 100-lb. sacks.

**Price, \$1.50; 500 lbs. \$6.00.**

**NOTE.**—Never apply fertilizer of any kind, chemical or barnyard, directly on the seed or roots of plants. Mix it with the soil.

**NOTICE—DELIVERY CHARGES.**—Our margin of profit is so small on Fertilizers that we cannot deliver anywhere. To depots add 25c for first 100 lbs. and 10c for each additional 100 lbs. These charges are only one-half of what we now pay the draymen.

## Kirk System of Fertilizing and Spraying

A simple, practical, easy way of spraying or fertilizing. The water as it passes through the feeder, slowly dissolves the cartridge contained therein and is applied upon whatever you wish it.

### THE KIRKE FEEDER

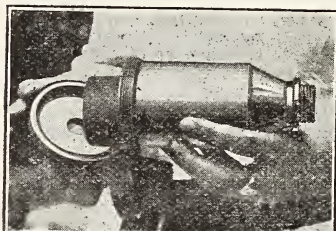
Consists of a cylindrical nickel-plated metal cartridge holder, which is made to connect to any standard size water faucet or hose coupling, and in which is placed a KIRKE Fertilizer, Insecticide or Fungicide cartridge.

We prefer to put the Feeder or cartridge holder on the end of the hose, then screw on the nozzle and turn the water on.

**Price \$3.25 postpaid.**

### KIRKE CARTRIDGES

To be placed in the **Kirke Feeder**. They are composed of the highest grade of concentrated and extremely active chemicals, and dissolve gradually with even and positive distribution.



The Kirk Feeder Showing Cap Off and Cartridge Inserted.

### KIRKE FERTILIZER TABLETS

#### Sprinkling-Can Plant Food

For house plants in pots, porch boxes; flowers or vegetable gardens or grass plots, that are watered by hand.

One tablet is enough for eight gallons of water. Can be dissolved in a stronger solution and then diluted when used.

This fertilizer promotes and sustains vigorous, healthy, luxuriant growth and abundant and richly colored flowers.

**Price per box of 12 tablets, 50c postpaid.**

### PRICE LIST OF KIRKE CARTRIDGES.

	Each
Prices subject to market prices of chemicals.	
Fertilizer Cartridges—For garden and lawn.....	\$ .40
Tobacco (Nicotine and Soap)—For all sucking insects	.50
Arsenate of Lead—For all leaf-eating insects.....	.65
Bordeaux (Fungicide)—For mildew, blight, rust, etc.	.50
Angle Worm Destroyer—For Tennis Courts, Lawns, Golf Links, etc. ....	1.50
Sulphur Compound—Insecticide and Fungicide Spray	.35
Fly-Maggot Compound—Disinfectant and Germicide for stables, kennels, coops, pens, workshops, etc..	.35
<b>NOTE.</b> —Add 5c each extra if wanted by mail.	

"KIRKE SYSTEM" once used always used. "Kirke System" received a special award at both the Philadelphia and New York Flower Shows. **DESCRIPTIVE CATALOG ON REQUEST.**



We Recommend and Sell

# Mulford Cultures

## FOR LEGUMES

To supply or increase the nitro-gathering bacteria in the soil



These alfalfa plants were sown same day in the same soil. Illustrations tell their own story.

Mulford's experts claim an "ALL-CROP" culture is not practical.

Without these germs a good crop is impossible. Therefore always inoculate the seeds mentioned at planting time with the MULFORD CULTURES, which contain active nitro-fixing bacteria. The bacteria in this product have all been proved by actual test to be active and vigorous. It is easily and quickly used by mixing with water and applying to the seed or soil; the directions which accompany each package are so complete and explicit that anyone can use it.

**MULFORD CULTURES** are "DIFFERENT" and should not be confused with other brands. The count is different (bacterial counts show fully twice as many bacteria as in the old-form cultures). The bottle is different (being sealed—an important feature which prevents all possibility of contamination from the outside air).

### Increase Your Crops—Improve Your Soil

Legumes offer the best-known means of maintaining soil fertility and rejuvenating over-cropped and worn-out fields. They add both humus and nitrogen to your soil and thus increase your yield of non-legume crops.

The U. S. Department of Agriculture and many State Agricultural Experiment Stations recommend inoculation of legumes with nitrogen-fixing bacteria to induce a prompt "catch" and increase your yield.

**MULFORD CULTURES** are scientifically prepared and tested by experts, in the biological laboratories of H. K. Mulford Co., Philadelphia, with the same degree of care as Mulford Antitoxins, Serums, Vaccines, etc., which are standard all over the world.

**CAUTION**—Be sure to specify the particular legume on which you desire to use the MULFORD CULTURES otherwise we will not know how to fill your order. We have it for Alfalfa, Red Clover, White Clover, Sweet Clover (Bokhara), Alsike Clover, Field Peas, Vetch, Garden Peas, Garden Beans and Sweet Peas.

The Mulford experts do not believe in an "All-Crop" culture.

**PRICES**—Quarter acre size, 50c; 1 acre size, \$1.50; 5 acre size, \$5.00, postpaid. **TRIAL**

**GARDEN SIZE** for Sweet Peas, Garden Peas, Garden Beans only, 25c; postpaid, 30c.

Why buy expensive commercial nitrates when you can grow legume crops and thus increase your yield and at the same time increase the nitrates and enrich and renovate your soil by Nature's own method?

**MULFORD'S BOOK, "THE EVIDENCE," SENT UPON REQUEST.**





# GRASS AND FIELD SEEDS



## ABOUT PRICES

## READ THE FOLLOWING

## ABOUT PRICES

Only one grade priced, the best, choice, clean seed. Write for prices in quantity. Single pound prices on Grass and Clover Seeds are prepaid. Prices per ten, fifty and one hundred pounds are not prepaid and are subject to market changes. Reference tables inside back cover.

### YOU WILL ALWAYS GET YOUR MONEY'S WORTH

Prices on Grass and Field Seeds change occasionally, therefore we cannot print prices good for any length of time. When ready to buy, write us for special prices, stating quantity wanted, or order what you want at catalog prices, and we guarantee that we will give you full value for the money sent, whether the price at the time you order be higher or lower. In other words, we will always ship seed to cover the full amount of money sent to us.

FOR AMOUNT TO SOW PER ACRE, SEE INSIDE BACK COVER

## SUDAN GRASS

### A New Forage and Hay Crop—A Valuable One-Season Crop

This grass was introduced in the States by the Department of Agriculture and has proved a great success, especially for dry-land conditions, and from many reports and observations and samples of the grass shown it appears to do equally well in all parts of the Willamette Valley.

Sudan Grass is strictly an annual and dies each year like Millet and must be seeded again each spring. This makes it fit admirably into any system of rotation, and while it does not benefit the soil like legumes, it does afford a change in crop and this is a good thing for the soil. Sudan Grass is tall, reaching a height of from seven to nine feet. The plant stools wonderfully and produces under favorable conditions as many as 100 stems from a single root.

It belongs to the sorghum family, but is more slender and grassy in manner of growth, earlier and hardier, and matures in 10 to 12 weeks. Yields a good crop of first-class hay. All stock relish the hay and thrive on it. The quality is said to be equal to timothy. Yields of from two to four tons per acre are common, and under irrigation they run as high as eight to ten tons per acre.

**Seeding.** Do not plant until the soil has become warm in the spring or any time during the summer as a catch crop, so long as 70 to 80 days intervene before frosts. Sudan Grass can be sown in rows 18 to 42 inches apart, drilled in with a grain drill or sown broadcast. In the semi-arid sections it is much more profitable to seed it in rows and cultivate, and even in the humid regions a small amount of cultivation appears to give added vigor to the plants. Seeded in drills 36 inches apart, 3 pounds per acre; drills, 18 inches apart, 6 pounds; broadcast by hand or grain drill, 16 to 20 pounds per acre.

**Harvesting.** Sudan Grass is easy to cut with a mower and cures readily. When cut for hay it is best to cut just after full bloom, so that it will have as much time as possible for a second growth. After cutting it renews its growth promptly when moisture conditions are favorable. The grass stools abundantly after first cutting and the second and third cuttings are very fine stemmed.

Every farmer looking for a new forage or hay crop should try at least an acre or two. Beware of cheap, inferior seed.

**Prices Select, Tested Seed:** 10 lbs. \$2.75; per lb. 35c postpaid. Write for quantity price.

### Kentucky Blue (*Poa Pratensis*)

Remarkable for its ability to adapt itself to a great variety of soils, succeeding on an average dry soil as well as on a moist meadow. An abundant yielder and presents a handsome green appearance early in the spring, thus making it of great value for lawn mixtures. Our extra fancy grade for lawns is unequaled.

**Fancy 10 lbs. \$3.50; per lb. postpaid 40c.**

**H. Q. extra fancy, 10 lbs. \$4.00; per lb. postpaid 50c. Write for quantity price.**

**NOTE.**—Our H. Q. (highest quality) Extra Fancy seed is unexcelled for weight and purity. Few dealers handle this high grade re-cleaned seed on account of its cost. This seed, straight or mixed with Fancy White Clover is excellent for lawns.

### English Rye Grass (*Lolium Perenne*)

A strong-growing, hardy perennial grass, noted for its nutritive qualities. It is equally valuable for both grazing and hay. It grows very rapidly and makes a good showing in a few weeks.

**For Lawns** this is used and recommended by many gardeners. If sown thickly, it makes a good hardy lawn, and for large grounds and parks it is very successful. Often mixed with White Clover.

**10 lbs. \$2.25; per lb. postpaid 35c. Write for quantity price.**

### Creeping Bent (*Agrostis Stolonifera*)

Perennial. A grass desirable for either lawns or permanent pastures on account of the fine, firm and enduring turf it produces; especially adapted to moist situations.

**Per lb., postpaid, 75c**

**NOTE.**—We know you can buy cheaper Grass Seeds from other dealers. We offer only the **BEST RECLEANED HEAVY CLEAN SEEDS**—by far cheapest to buy.



## Grass Seeds—Continued

For amounts of seed to sow per acre, see inside back cover

### Orchard (Dactylis Glomerata)

Of the greatest value in permanent pasture mixtures; thrives best in moist, shady places, but will withstand drought exceedingly well. Valued for hay crop, as it is very nutritious if cut early. Its inclination to grow in tufts necessitates other grasses being sown with it.

10 lbs. \$3.75; per lb. postpaid 50c. Write for quantity price.

### Red Top (Agrostis Vulgaris)

Of great value for mixing with hay or permanent pasture grasses; will succeed in nearly any soil, but thrives best in a rich, moist soil; makes a fine bottom growth, rendering it invaluable to be sown with grasses, such as timothy and orchard.

Choice Seed, not hulled, 10 lbs. \$1.60; per lb. postpaid 25c.

Fancy Hulled Seed, 10 lbs. \$2.50; per lb. postpaid 30c. Write for quantity price.

### Mesquite (Holcus Lanatus)

It is usually sown on virgin soil, without cultivation, after the ground has been burned over.

Fancy Hulled Seed, 10 lbs. \$2.50; 100 lbs. write. Per lb. postpaid 35c.

### Italian Rye (Lolium Italicum)

A quick-growing grass, attaining a height of 2½ to 4 feet; very desirable for meadows or permanent pastures; thrives best on soils that are slightly moist, and will even stand considerable overflow; grows easily and bears an abundance of foliage that makes the best and sweetest hay imaginable.

10 lbs. \$2.25; per lb. postpaid 35c. Write for quantity price.

### Timothy, (Phleum Pratense)

As a hay crop, timothy is unsurpassed by any other grass. Thrives on ordinary soil, but succeeds best in a moist loam. Best to cut it when in blossom or soon after flowering. Beneficial to sow timothy with red top and red clover, as they produce more of a bottom growth.

10 lbs. \$2.00; per lb. postpaid 30c. Write for quantity price.

### Bromus Inermis (Brome Grass)

On account of its strong perennial character, and its unusual drought-resisting powers, is the best grass we have for the semi-arid regions of the Northwest. It grows luxuriantly, is freely eaten in either the dry or green state by cattle, and yields enormously, making the best of hay for horses or cattle.

Per lb. postpaid 40c. Write for quantity price.

### Crested Dog's Tail (Cynosurus

#### Cristatus)

A perennial grass, forming a smooth and lasting turf, excellent in mixtures for lawns, putting-greens, and pastures. It thrives best on rich, moist land, but can accommodate itself to almost any soil, and, as the roots penetrate deeply into the ground, it can stand severe drought.

10 lbs. \$4.25; per lb. postpaid 55c

### Rhode Island Bent (Agrostis Canina)

Forms a very fine turf even on light soils; desirable for lawns, as it forms a very close sward.

Per lb. postpaid, 65c.

# FIELD AND FARM SEEDS

Single pound prices are prepaid. Ten, fifty and one hundred pound prices are NOT prepaid and subject to market changes. Seed to cover amount remitted always sent unless otherwise ordered. See notes, page 42. Write for prices on larger quantities when ready to buy.

### White Jerusalem Artichokes

Planted and cultivated for the tuber, the same as potatoes. Of great value for feeding stock. They are the best and cheapest hog feed known. They are remarkable for great productiveness, over 25 tons have been raised on 1 acre. Easier to grow than potatoes. They need not be dug. If hogs are turned in on them they can easily root the tubers out. One acre will keep from twenty to thirty hogs in fine condition for several months. Said to be a preventive of cholera and other hog diseases. Excellent for fattening if fed with a grain or mash ration. Plant 400 lbs. per acre early in the spring.

By freight or express, 10 lbs. 40c; 50 lbs. \$1.50; 100 lbs. \$2.25. Per lb., prepaid, 15c; 4 lbs. 50c. Write for quantity price.

### LACTEIN — CONDENSED BUTTERMILK The Great Hog Food

You need it if you have hogs or poultry. See Index for page giving full information.



Artichoke Tubers.

**You Need One** DAD'S NEW ELECTRIC LIGHT is something that will be of real service to our city, suburban and country customers. It's an all-around light, lantern or flashlight, in fact, it's "THE LIGHT OF ALL LIGHTS"—makes "NIGHT TIME A BRIGHT TIME." It takes the place of ALL open flame, gas or oil explosive lights for ALL PEOPLE and ALL PURPOSES. It is always ready. See page 122.



## Barley

### BEARDLESS.—The earliest barley known.

The straw is about the height of the common barley, but better, and will stand up on any land; with good season, land has produced 80 bushels per acre. Sow as early as you can; frost does not hurt it. This, as its name implies, is almost entirely beardless, and as easy to grow and handle as oats. It is becoming more popular each season.

Per lb., postpaid, 20c. Write for quantity prices.

### WHITE HULLESS (Bald Barley).—A

grand barley for stock feeding. Grain plump, heavy, and when threshed is hullless like wheat; a heavy cropper. When grown and cut for hay it produces a magnificent crop, which is very rich and almost equal to a grain feed. Much relished by horses and stock of all kinds. An excellent hog feed. Culture same as common barley.

Per lb., postpaid, 25c. Write for quantity prices.

**COMMON BARLEY.**—We always aim to have a nice, clean stock of good Seed Barley on hand at all times.

Per lb., postpaid, 20c. Write for quantity prices.

## Buckwheat

**SILVER HULL.**—A very good and popular variety; grain is of a light gray color; has a thin husk; matures early, and yields heavily; a good milling variety.

10 lbs. \$1.25; 100 lbs., write; per lb. postpaid 25c.

**JAPANESE.**—Good yielder, ripens early; excellent for bee to work on as it remains in bloom longer.

10 lbs. \$1.00; 100 lbs., write; per lb. postpaid 25c.

## Cheat Seed

Cheat seed yields a good crop of hay, especially on low or moist soil, and will stand considerable overflow without harm. Sow in the fall or early spring, the same as oats and about 100 pounds per acre.

10 lbs. 75c; per lb. postpaid 20c. Write for quantity prices.



## Cow Peas

Are really small beans of vigorous habit and heavy foliage of great nutritious value, yielding five to nine tons of green feed per acre, or can be cut and cured like clover. They are great nitrogen gatherers and one of the best fertilizers when turned under. Sow two bushels per acre.

**WHIP-POOR-WILL.**—Upright or bush growth, earlier maturing, easily harvested.

**CLAY.**—Of vigorous growth. Excellent for ensilage; can be planted in hills with corn.

10 lbs. \$1.25; 100 lbs., write; per lb. postpaid 25c.

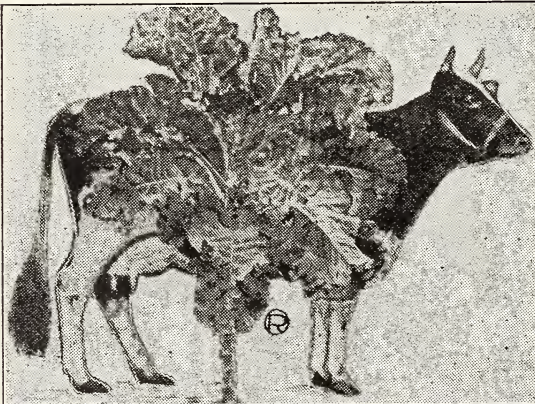
## Thousand-Headed Kale

Commonly Called COW KALE

Recommended by agricultural colleges, granges and dairymen as one of the most valuable green forage plants for the Pacific Coast.

It grows rapidly and produces a mass of large, thick, curly green leaves, rich and succulent, which are eagerly eaten by stock and poultry. If planted early will produce valuable green feed during the dry summer months. Makes the most rapid growth if sown in the early spring, but locally it is extensively planted in summer and fall for winter feed. Will stand light freezing. Stalks can be cut off, or the larger lower leaves broken off, leaving the tops to grow. Under good cultivation plants will grow from 5 to 6 feet high. Sow 2 to 3 lbs. per acre, thinly in drills 2 to 4 ft. apart and thin out. For late planting (July and August) it is better to have strong plants from earlier seeding and set out same as cabbage, 2 ft. apart, in rows. Thin out later if plants attain extra large size.

Pkt. 5c; oz. 15c; 4 ozs. 30c; lb. 90c, postpaid.

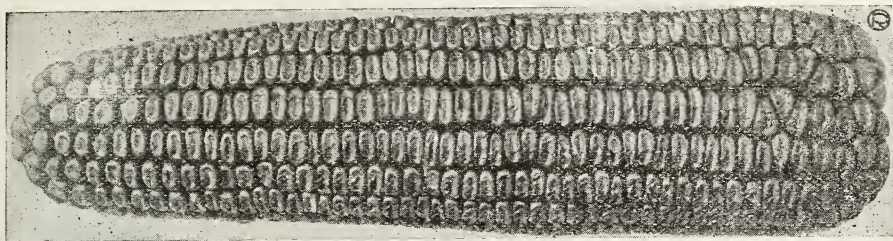


Thousand-Headed Kale.

This cut is from photo, and gives you a good idea of the size and plant when well grown.

**ROOTS AND CORN.**—Progressive farmers always provide full cellars of Carrots, Sugar Beets, Mangels and Swede Turnips—and we believe it is in the best interest of every farmer to grow plenty of Field Roots in addition to a liberal acreage of Corn for his live stock. These greatly reduce the grain and hay consumed, and keep the stock in excellent health.





Routledge Pride of the West.

## FIELD CORN FOR OREGON

If you want to raise some good Field Corn, plant our Western grown Seed Corn. The strains we are offering you are acclimated and especially adapted to our short, cool summers. Eastern and Southern grown field corn seed is all right for green fodder, but of little value on this Coast, if you want to raise matured, dry ears.

### Routledge Pride of the West

**Oregon grown; acclimated.** A grand success in Oregon. We have been raising this variety for years, and by selecting the earliest ripening and best select ears, now have a strain that is a revelation to many people who have thought Oregon and Washington could not raise profitable field corn.

**Routledge Pride of the West Field Corn** is an early maturing variety, producing stalks from 6 to 8 and 10 feet high, and large ears, 8 and 9 inches long. Cobs covered with 14 to 16 rows of deep, yellow kernels. It is a heavy yielder. Our strain has been greatly improved in the last 2 years. Plant some of this corn this season; you will be pleased with results, we are sure.

We claim this is the **earliest and heaviest yielding strain** of Yellow Dent corn grown in Oregon. Try it and be convinced.

**Large pkt. 10c; 1b. 25c, postpaid. Not postpaid, 10 lbs. \$1.60; 100 lbs., write.**

Bancroft, Oregon, April 7, 1918.

Routledge Seed & Floral Co.,

Gentlemen: You sent me some corn, the *Pride of the West*, last year, and I would say that it is the best corn that I have ever planted.

Yours truly,

F. L. CHRISTIE.

### Longfellow Extra Early

**Unsurpassed for Early Mature Ears and Production.**

This valuable corn is a flint variety, Oregon grown and thoroughly acclimated. Has been grown near Portland for the past six years with great success.

We believe this is hardier, earlier, and will grow under more adverse conditions than most any other kind. We recommend Longfellow to all growers who have not had success with the Yellow Dent varieties and for sections with a short season and cool nights.

**LONGFELLOW FLINT.**—The ears are 8 rowed, from 10 to 15 inches long and  $1\frac{1}{2}$  to 1 $\frac{3}{4}$  inches in diameter. The cob is very small, kernels large, broad, glossy, deep yellow and very rich in food value. Stalks 5 to 7 feet high. Fifty lbs. of corn on the ears will shell 40 lbs. of corn, leaving only 10 lbs. of cob, showing that the grain yield is equal, if not greater than the large eared kinds.

**Per large pkt. 10c; 1b. 25c, postpaid. Not prepaid, 5 lbs. 85c; 10 lbs. \$1.60; 100 lbs., write.**

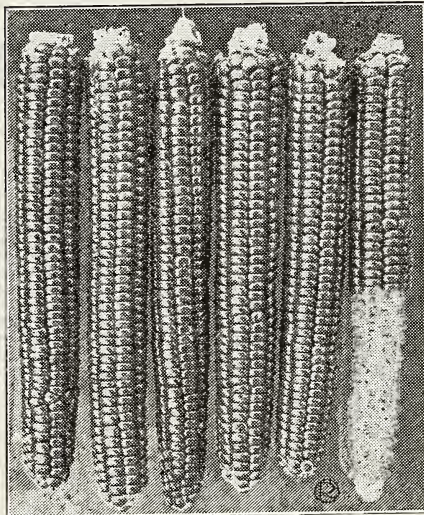
Gresham, Oregon, Dec. 20, 1918.

Routledge Seed & Floral Co.,

Gentlemen: Your *Pride of the West* field corn is the best I ever raised. Planted it in July and it was ready for the silo October 1 without a drop of rain. Planted earlier it certainly would mature a big crop of dry ears for Winter feed.

Yours truly,

A. J. KRUEGER.



Longfellow Extra Early Flint

### MINNESOTA NO. 13—YELLOW DENT

Well and favorably known in many sections of the West. Produces splendid large ears with deep kernels of bright yellow. A strong and vigorous grower with heavy foliage. A good fodder corn.

**Oregon Grown.**—Large pkt. 10c; 1b. 25c, postpaid. Not prepaid, 10 lbs. \$1.40; 100 lbs., write.

### SEED POTATOES

We offer strong, healthy, vigorous stock, that will give you a profitable crop. Our Catalog tells all.

**OUR OREGON GROWN ACCLIMATED FIELD CORN WILL PLEASE YOU.**



## Field Peas

Field Peas are a very profitable crop and are grown here very extensively. They can be grown alone or with oats. When planted with oats and cut green they make a large amount of very rich feed; also very valuable for enriching the soil if plowed under. The dry peas make excellent hog feed and are quite fattening. Sow, if alone, 2 bushels to the acre; if with oats  $1\frac{1}{2}$  bushels peas and 2 bushels oats.

**WHITE CANADIAN.**—The leading and most popular kind; seed creamy white; a heavy cropper. Yields 30 to 50 bushels per acre.

10 lbs. \$1.50; 100 lbs., write. Per lb. postpaid 25c.

**BLUE PRUSSIAN.**—Valuable variety, seed green. Used extensively as a dry soup pea.

Per lb., postpaid, 25c. Stock scarce, write for price.



Insure a large heavy crop of peas by inoculating the seed with "Mulford's Cultures." (See pg. 41.)

A United States Department of Agriculture Bulletin says:

"It is worse than useless to attempt to grow any leguminous crop without being certain of the presence of the bacteria, which enable the plants to fix free nitrogen. Certain regions are practically devoid of the right kind of bacteria, and unless some artificial means of inoculating with the germ is resorted to, the crop will be a failure." Use Mulford's Culture, page 41.

## SEED OATS

### Routledge Prize Oats

This wonderful new Oat, introduced by us in 1908, has proved in growing contests all we claimed for it. **Routledge Prize** certainly is a prize oat, and a real prize-winner at the county fairs wherever it has been shown. This grand oat belongs to the tree or branching class, and is a vigorous, healthy grower of strong stooling qualities. This is one of the heaviest yielding oats introduced to date. From several hundred samples we sent out, spring of 1908, the lightest yield reported was over 100 bushels per acre, and from that up to 200 and 300 bushels where it was given special cultivation. Under ordinary conditions and good soil, we know of no variety that will out yield it.

Routledge Prize Oat is a very early, drought-resisting variety. Grain of good size, plump and heavy, and one that matures quickly, making it a very valuable variety where the seasons are short. While this is really a spring oat, it can safely be planted in the fall in the Willamette Valley or any locality where the winters are mild. White seeded variety.

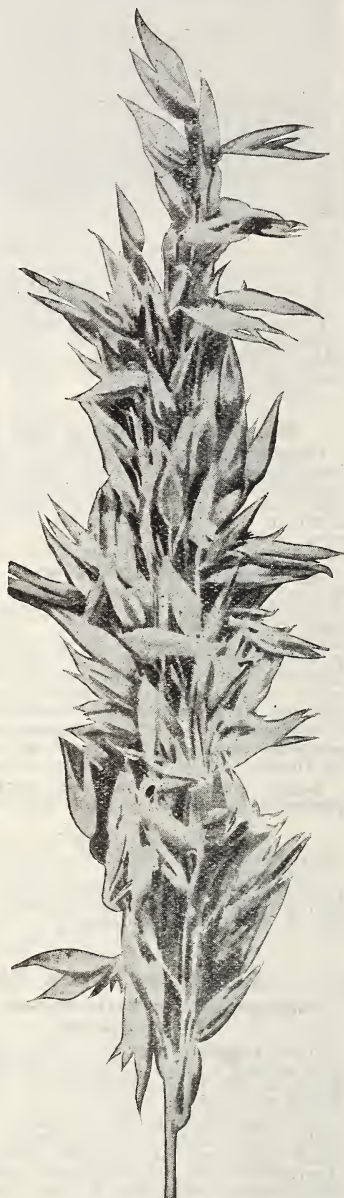
Prices: 1 lb. 20c; 3 lbs. 50c, postpaid. Market unsettled. Write for prices, stating quantity wanted.

### Shadeland Challenge

The best white side oat we know of. Hardy, vigorous, early maturing, and still maintains its supremacy as the best, heaviest yielding, general purpose Oat in existence.

"**Shadeland Challenge**" is a heavy, plump, thin-hulled oat whose immense heads often measure 18 inches in length, bearing from 250 to 300 kernels. Shadeland Challenge ripens in about 100 days from planting if spring sown, and 100 bushels per acre is not uncommon on ordinary soil. Can be planted in the fall (where the winters are mild) or as early as possible in the spring.

Prices: 1 lb. 20c; 3 lbs. 50c, postpaid. Market unsettled. Write for prices, stating quantity wanted.



Routledge Prize.

### White, Gray or Black Seed Oats

We always aim to have a selected cleaned stock of good White, Black or Gray Seed Oats. Can sell them at about market price for No. 1 seed. Market unsettled. Write for prices, stating quantity wanted.

**DON'T** Practice false economy by buying low-priced grains. It don't pay. Our motto—Quality First Price as Low as we can make it.



### Kaffir Corn

An excellent fodder plant. Seed small and almost round, valuable poultry and pigeon food. It does best sown thinly in drills three feet apart.

10 lbs. \$1.50; per lb. postpaid 25c

### Lentils

Succeed best in dry, sandy soil. A leguminous annual, the seeds of which are valuable for pigeons and are used largely for soups. The leafy stalks make good forage.

Per lb. postpaid 30c

### Millet

Sow in April, May or June, 20 pounds for seed or 35 pounds for hay per acre. Must be sown early to mature in Willamette Valley.

**EARLY FORTUNE.**—This variety seems to do extra well here; try it. Heads large and loose, and seed is amber red and three times as large as the German. Makes good poultry feed.

10 lbs. \$1.50; 100 lbs., write; per lb. postpaid 25c

**LIBERTY.**—An improved variety, yielding a larger crop of seed than the common millet. It is also taller than the common, and yields a heavier crop of hay.

10 lbs. \$1.50; 100 lbs., write; per lb. postpaid 25c

**HUNGARIAN.**—A dwarf millet: superior for hay.

10 lbs. \$1.50; 100 lbs., write; per lb. postpaid 25c



Millet.

### Profitable Potatoes for Seed—See Pages 28-29

### Rape, Dwarf Essex

We offer you true, pure seed. One of the best forage plants, on account of the large amount of green feed it will produce at a season of the year when everything else is dried up. It has yielded ten tons of green forage per acre, and has twice the feeding value of green clover. Sheep, swine, cattle and poultry eat it readily. Rape will do well on almost any soil. Prepare the ground as for turnips, and sow any time from May till September; or plant it with grain. Sow, per acre three pounds, in drills; or, if broadcast, five pounds.

10 lbs. \$1.75; write for quantity prices; per lb., postpaid 30c.

### Seed Wheat or Rye

When ready to buy any variety of Seed Wheat, write us for quotations on quantity wanted or send in your order and we will give full value at lowest market price.

### Speltz—Emmer

Sow in the spring, the same as wheat, at the rate of two bushels per acre. Cut when the grain is past the middle stage of milk, when it will make splendid grain and lots of rich straw hay. Thresh like wheat, only not so closely. Can be fed whole, rolled like barley, or ground.

10 lbs. \$1.20; 100 lbs., write; per lb. postpaid 25c

### Sugar Cane or Sorghum

A valuable crop to grow for fodder or ensilage, as it furnishes an immense tonnage to the acre.

10 lbs. \$1.75; 100 lbs., write; per lb. postpaid 30c

### Vetches

**OREGON VETCH** (*Vicia Sativa*).—Oregon's greatest forage plant. Often called Fall Vetch. Grown very extensively in Western Oregon and Washington, especially in the Willamette Valley and on the Oregon coast. It furnishes an abundance of excellent feed, either green or dried. The seed is generally mixed with wheat, oats or rye having a stiff straw to hold it up. Sown alone 85 pounds or 60 pounds with a bushel of grain per acre. Sow in the fall or early spring.

**Note.**—Crop very short and seed is scarce and high; write for prices.

Per lb. postpaid 25c

**HAIRY SAND OR WINTER** (*Vicia Villosa*).—This variety thrives on poor arid, sandy soils. It is sown in the fall or spring, mixed with rye, which serves to support the plants. Sow 20 pounds per acre.

10 lbs. \$2.75; per lb. postpaid 40c



Vetches.

### THE WISE ONES

Will use Mulford's Vetch Culture to inoculate their seed before sowing. There is no question about its **VALUE**. "Evidence," a new booklet, will prove it. (See page 41.)

Single pound prices are prepaid, but ten, fifty and one hundred pound prices are NOT prepaid and subject to market changes. See notes, page 43. For amount of seed to sow per acre see table inside back cover.



## ALFALFA AND CLOVER SEEDS

Single pound prices on Grass Seed are prepaid. Ten, fifty and one hundred pound prices are NOT prepaid and subject to change. See notes, page 42. For amount of seed to sow per acre see table inside back cover.

### White Clover (*Trifolium Repens*)

Used largely in lawns and permanent pasture mixtures. Accommodates itself to a great variety of soils. High grade clean seed is very scarce and high this year; beware of low-priced seed this season.

Choice Seed, 10 lbs. \$6.50; per lb. postpaid 70c.

Extra Fancy Seed.—Per lb. postpaid 80c

For Lawns always buy our Extra Fancy Seed, which is the purest high quality seed obtainable, and the true very dwarf, hardy variety.

### Red Clover (*Trifolium Pratense*)

Hardy, and succeeds well on any good soil. Very short crop, prices high; write.

Per lb. postpaid 60c

### Alsike Clover (*Trifolium Hybridum*)

Valued highly for sowing with other grasses. Excellent for hay and pasture; valuable for bees; resists both drought and excessive moisture.

Per lb. postpaid 50c

Very short crop, prices high; write.

INOCULATE THIS  
SEED WITH  
MULFORD CULTURE

The MULFORD CULTURES contain nitrogen-fixing bacteria, which form nodules on the roots of field and garden legumes that act by collecting nitrogen from the air and converting it into nitrates—food for soil and plants. Get wise by reading page 41.



### Double Your Clover Crop

By treating all clover seeds you plant with Mulford's Culture. BEST BY TEST. See page 41.

### Alfalfa, or Lucerne Clover

Reports prove that Alfalfa will grow in all parts of the West, but requires a deep loose soil. Will not thrive on heavy clay or where there is hard pan. As soon as cut it immediately commences to grow. Excellent hay or pasture. Alfalfa, once established, is a crop so profitable that every farmer may well take great care to get a stand. Much has been published about its high feeding, fertilizing and wonderful yield possibilities.

Price: 10 lbs. \$3.00; 100 lbs., write. Per lb. postpaid 40c.

### Dry Land Alfalfa

For high, dry, hot land, where irrigation is impossible.

Price: 10 lbs. \$3.00; 100 lbs., write. Per lb. postpaid 40c.

### Crimson Clover (*Trifolium Incarnatum*)

A thrifty annual. It germinates quickly, grows rapidly and stools abundantly.

10 lbs. \$3.50. Per lb. postpaid 45c

### Sweet Clover (*Melilotus*)

Sweet clover has come to stay. There is no doubt about it. Ask any farm paper, any state college, the U. S. Department, or better yet, any man who has grown it.

Sweet clover is used as either a feed crop or as a fertilizer to plow under to improve the soil and increase the crop to follow. It grows fast and is easy to start.

Grows luxuriantly on good soils but it will also grow and thrive on thin, sandy soil, hardpan, gumbo, rocky upland, clay and alkali land.

Sweet clover lives two years. It makes large, rapid growth the first season and can be cut for hay or pastured the last half of the summer, but does not bloom or bear seed. The second year it blooms, bears seeds and dies. Will make two crops of hay or a crop of hay and one of seed the second year. Can be plowed under either the first or second year, but to get the full value in humus the second season is better on account of the large roots that penetrates the lower layers of soil thereby loosening it up and adding much humus and more nitrogen.

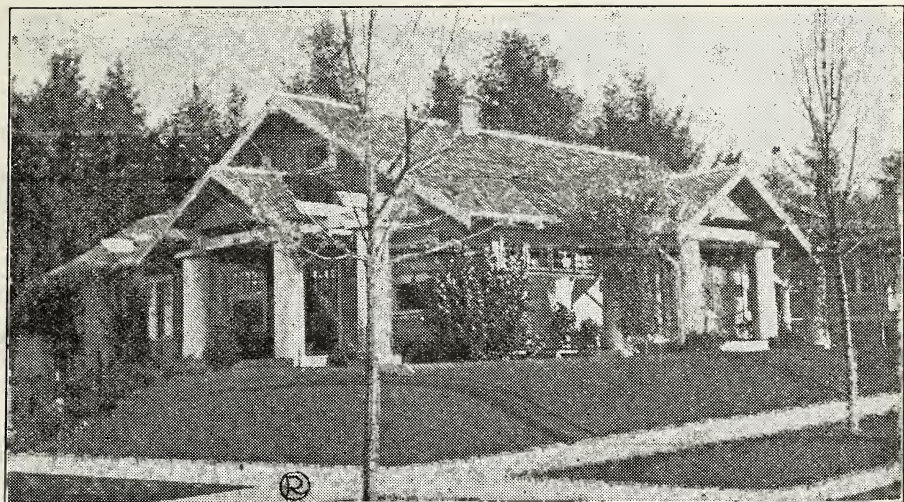
Sown very early in the spring. It does well sown either alone or with a nurse crop of small grain. Use 15 to 20 pounds of seed per acre.

Sweet Clover makes excellent pasture for horses, cattle, sheep, hogs or chickens. A very early and continuous cropper.

Price: Per lb. 45c postpaid; 10 lbs. \$3.50; trial pkg. 10c. Write for quantity price.

For Best Results Treat All Clover Seeds with Mulford's Cultures (See p. 41)





One of our Portland Bungalows with a beautiful lawn, shrubs and vines

Nothing adds a greater air of refinement to a home than a beautiful, well-kept lawn. The time, labor and money spent is a good investment, to say nothing of the pleasure it gives the owner, as well as those who pass by. The planting of a few Shrubs, Vines and Roses should not be forgotten. The pretty home above is "well done," attractive and inviting, and the owner has just cause to be proud of it.

## LAWN GRASS SEED

Though we offer separately, seed of many of the grasses suitable for the lawn, we consider as very erroneous the somewhat prevalent idea that any single variety of grass seed is preferable or equal to a mixture.

### R. R.'s Evergreen Lawn Grass

To obtain a good Lawn Grass Mixture, it is necessary that the best possible seed of fine grasses be used in the combination, embracing such varieties as are of neat, close growth, extreme hardness, and adapted to produce a quick, permanent sod. Judicious selection of seed, knowledge of the habits, vigor, quality and hardness of varieties used in the mixture can only be gained by thorough and practical tests under different climatic and soil conditions. After many years' experience, we offer our pure, clean Evergreen Lawn Grass Seed Mixture, composed of a thoroughly balanced combination of various native and foreign fine-leaved, deep-rooting grasses of interweaving habit, that will flourish under varied soil and climatic conditions, and which may be depended upon to produce a beautiful, compact evergreen sod that will resist tramping and hard usage, and at the same time present that handsome, velvety appearance so much desired.

**PRICE, 45c per lb. postpaid; 10 lbs. or more NOT PREPAID at 40c lb.**

**Note.**—You better spend a few cents or a dollar extra on the seed you buy and have a fine lawn that you'll be proud of. Sow 1 pound seed to 15 feet square for best results.

### Seeds for Lawns and Special Mixtures

**SEED.**—There is as much difference between clean, high grade grass and clover seeds for lawn making and the common or ordinary grass seeds as there is between high grade white flour and bran. You would not think of trying to make light, white bread of bran, neither should you expect to make a fine green, velvety lawn from low grade, light weight, immature and foul grass seeds. **Weight purity and germination** is what sets the price of grass and clover seeds. We buy and use the **highest grade, pure tested seeds** for our Evergreen Lawn Grass Mixture. Of course, they cost more, but we know from experience that they **give best results** and are the **only kind** of seeds that it pays to use if you want a beautiful lawn. Do not buy low priced Lawn Grass Mixtures and expect good results. **NO ONE** gives you anything better than you pay for.

**SPECIAL MIXTURES.**—For all round general conditions, our Evergreen Mixture is unexcelled, but we will prepare special mixtures for shady places, low, wet soils, very dry soils and terraces. Just mention it when ordering.

**WHITE CLOVER.**—Many gardeners like white clover mixed in lawn seeds and it is excellent, especially if your soil is heavy or poor. White clover grows quickly and acts as a nurse crop and protects the fine leaved grasses. Evergreen Lawn Grass with one-fourth white clover is 10c per pound more.

### FEED THE LAWN

Do not starve the grass if you want it to look green and velvety; use "Wonder" and "C-M," as per directions. See pages 38 and 39. Also read about Lawn Rollers, page 123.





Our flower seeds are grown by specialists and are unsurpassed. The following list contains a general assortment of the choicest and most popular and easiest grown flowers for conservatory, greenhouse or garden culture.

### How to Raise Flowers Successfully from Seeds

The above is the title of a 2-page leaflet we have issued for our customers. It tells **HOW, WHEN and WHERE** to plant. It is free to all. You will find it of great value.

**IF YOU WILL MEMORIZE** the following definition of the flower classes **THEY WILL HELP YOU WONDERFULLY** in the selection of seeds and your garden work in general.

#### ANNUALS

These grow from seed, flower, mature their seed, and die in one year, or in other words, the same season.

**Half-Hardy Annuals** are those which should be started early in the house, conservatory or hotbed, and transplanted to the garden in settled warm weather.

**Hardy Annuals** are those which can be sown in the open ground in early spring or started inside and transplanted if **very early** flowers are desired.

#### BIENNIALS

These grow from seed, sown from June to August, flower, ripen their seed and die the next year, though some varieties bloom the same season if sown early in gentle heat.

**Hardy Biennials** will winter in the open ground without protection.

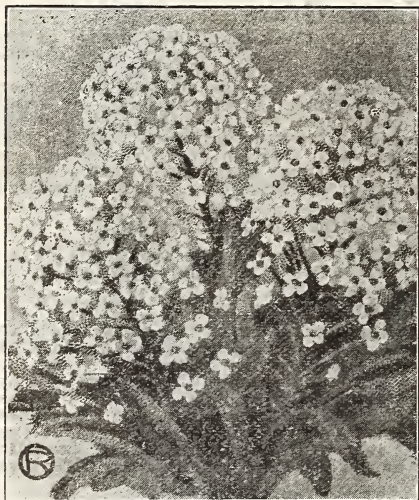
**Half-Hardy Biennials** require the protection of a cold-frame or cool-house during the winter.

#### PERENNIALS

These grow from seed, and continue flowering annually for many years after the first season. Some varieties flower the first season if started very early. Sow in the fall for flowers next year.

**Hardy Perennials** can remain in the open ground during winter without protection.

**Half-Hardy Perennials** require the protection of a cold-frame or cool-housing during winter.



Sweet Alyssum.

### Ageratum

Half-hardy annuals, especially well adapted to edge large beds of geraniums, salvia coleus or cannas; flower continuous through the summer. 15 inches.

**Mexicanum.**—Dwarf, blue. Pkt 10c; ¼-oz. 30c

**Album.**—Pure white, dwarf.

Pkt. 10c; ¼-oz. 25c

**Finest Mixed.**—All colors.

Pkt. 5c; ¼-oz. 25c

**Dwarf Little Blue Star.**—New; one of the handsomest blue-flowered dwarf edging plants; grows 5 inches high, and is just covered with small, bright blue flowers.

Pkt. 15c

### AGROSTEMMA—Rose of Heaven

**Coell-Rosa.**—Superb free-flowering, hardy annual, rose-colored flowers; fine for cutting; height 1½ feet; July to September.

Pkt. 5c; ¼-oz. 25c

### ALOYSIA—Lemon Verbena

**Citriodora.**—A greenhouse shrub, valuable for the fragrance of the foliage; 2 feet.

Pkt. 15c

### Alyssum

One of the most popular hardy annuals, used especially for edging and also valuable for cutting on account of the fragrance of flowers.

**Sweet.**—Pure white; 6 inches; June to November.

Pkt. 5c; oz. 50c

**Little Gem.**—The dwarfest and best for design bedding; plants very compact and bushy, and grow only 3 inches high.

Pkt. 10c; oz. 75c

**Lilac Queen.**—Dwarf, compact, lilac flowers.

Pkt. 10c

**Saxatile Compactum (Gold Dust).**—Hardy perennial; yellow flowers; April to June; height 9 to 12 inches.

Pkt. 10c; ½-oz. 20c

### Acroclinium

Hardy annual, with everlasting flowers; good for cutting; flowers double and dry nicely if cut in bud; 1 foot; July to October.

**Album.**—Double white.

Pkt. 5c

**Mixed.**—All colors.

Pkt. 5c



**Improved Giant Crego Aster.****White Fleece**

One of the largest and most perfect of the early flowering (Comet type), bearing flowers 5 inches and over across, formed into a plummy globe of glistening white; blooms at the same time as *Lavender Gem*, making a splendid companion.

Pkt. 10c; 1/8-oz. 40c

**Mikado**

Very similar to the *Crego's Giant*, but more dwarf in growth and comes into bloom fully two weeks earlier. The plants attain a height of about 18 inches, of branching habit, and the flowers, borne on long, strong stems, are of colossal size, five and six inches across. We offer two colors, viz.:

**Mikado Pink** (or *Rochester*). A charming shade of pink suffused with lavender.

Pkt. 10c; 1/8-oz. 50c

**Mikado White**. Of purest glistening white; a magnificent and artistic flower.

Pkt. 10c; 1/8-oz. 50c

**New Giant Comet**

Considered by many to be the most beautiful of all the *Asters* (see cut). It is an ideal cutting variety, as each plant bears freely exquisitely formed large flowers on long stiff stems.

**Pure White, Pink, Lavender or Finest Mixed.**

Pkt. 15c; 1/8-oz. 60c

**Lavender Gem**

One of the best; comet type; very early and a charming shade of lavender; excellent in every way.

Pkt. 15c; 1/8-oz. 50c

**New Crimson Giant**

A late-branching variety of upright growth with extra large, densely double flowers of rich blood-crimson; makes a brilliant bed or border and is splendid for cutting. The form of the flower is nicely shown in plate above.

Pkt. 15c; 1/8-oz. 60c

**ASTERS, FINE MIXED.**—A mixture of choice kinds for all season blooms.

Pkt. 10c; 1/4-oz. 50c

**Asters**

One of the easiest and most satisfactory summer and fall flowers to grow. We take the utmost pains to select seeds from the most perfect flowers only, and wish to assure our patrons that our strains are the superiority of perfection.

**Improved Giant Crego**

The most beautiful and desirable aster we have ever seen; very hardy, free-flowering and one of the best for general planting; the plant is a strong, healthy grower, and will produce 12 to 15 long-stemmed flowers of the most graceful and pleasing style (see cut). With ordinary care you can grow flowers measuring 5 to 6 inches across. Most of the handsome large aster blooms you see in the Portland flower stores are of this kind.

**Pure White, Shell Pink, Rose Pink, Purple, Lavender or Mixed.**

Pkt. 15c; 1/8-oz. 50c

**SPECIAL.**—One packet each of the five colors only 60c

See Plant Dept., pages 75 to 79.

Fossil, Oregon.

Routledge Seed &amp; Floral Co.,

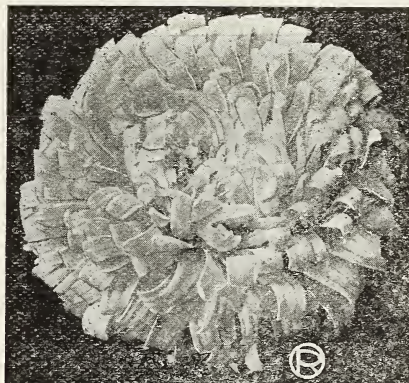
*Gentlemen: I sure am pleased with the Geraniums I got from you. They all grew and some of them are budded to bloom.*

MRS. MAUD SMITH.

**QUEEN OF THE MARKET.**—Most valuable for early cutting; the plants branch freely and produce a great many well-formed flowers nearly a month in advance of the later sorts.

**White, Pink, Lavender or Finest Mixed.**

Pkt. 10c; 1/4-oz. 50c

**Superb Late Branching.**

**SUPERB LATE BRANCHING.**—The most popular late-flowering aster. Flowers are very full, large in size, 3 to 4 inches across and borne on long stiff stems 2 to 2½ feet high. A very desirable, beautiful and satisfactory variety.

**Deep Rose, Dark Blue, Light Blue, Shell Pink, White or Finest Mixed.**

Pkt. 10c; 1/4-oz. 60c

**ASTER PLANTS** and all popular annual bedding plants supplied in season. See pages 79-80.



**AMARANTHUS**

**Caudatus (Love-Lies-Bleeding).**—Hardy annual; ornamental foliage plant; fine for bedding; green foliage with long, drooping crimson racemes; 2 feet.

Pkt. 10c; ¼-oz. 25c

**Cruentus (Prince's Feather).**—Dark red foliage and feathery flowers; 2 feet.

Pkt. 10c; ¼-oz. 25c

**Tricolor (Joseph's Coat).**—Ornamental; for foliage only; red, yellow and green.

Pkt. 10c

**ANTIRRHINUM—Snapdragon.**

Half-hardy perennial and annual; blooms in July if sown early in the house; one of our finest cut flowers; 2 to 3 feet.

**Queen Victoria.**—New, tall; very large; pure white; superb.

Pkt. 10c

**Daphne.**—Soft blush pink.

Pkt. 15c

**Golden Queen.**—Rich, pure yellow.

Pkt. 10c

**Defiance.**—Brilliant scarlet

Pkt. 10c

**Tall Giant, Finest Mixed.**—Our seed of this is exceptionally fine; height, 3 feet.

Pkt. 10c; ¼-oz. 25c

**Semi-Dwarf.**—Fine for bedding; 18 inches.

**Finest Mixed.** Pkt. 10c; ½-oz. 25c

**AQUILEGIA—Columbine**

Hardy perennials; are most elegant plants and invaluable for cutting or as hardy border flowers; beautiful and graceful; June to September. 2 to 3 feet.

**Benary's Long Spurred.**—Superb mixture of all the most desirable shades.

Pkt. 15c; ½-oz. 50c

**Single, Finest Mixed.** Pkt. 10c; ¼-oz. 20c

**Double, Finest Mixed.** Pkt. 10c; ¼-oz. 20c

**ARABIS—Rock Cress**

**Alpina.**—Hardy perennial; pure white flowers in close head; excellent for edging, rockwork or dry situations; 6 inches; April to June.

Pkt. 10c; ¼-oz. 35c

FOR PERENNIAL PLANTS SEE PAGES 80 TO 84.



Aquilegia (Columbine).



Antirrhinum.

**ASPARAGUS**

**Plumosus Nanus.**—A graceful pot plant for either house or conservatory (see illustration under Fern Plants); very finely cut, delicate lace-like foliage.

Pkt. 25c; 100 seeds \$1.00

**Sprengeri.**—Drooping foliage; adapted for hanging baskets or cutting.

Pkt. 10c; 100 seeds 50c

**BABY BREATH**

See Gypsophila, page 59.

**BALSAM—Lady Slipper**

Hardy annual, succeeding best in sunny situations, rich loam and moisture; very showy and of easy culture; 1½ feet; July to September.

**Prize Mixture.**—This strain will produce the most perfectly formed double flowers in the greatest variety of colors.

Pkt. 10c; ¼-oz. 35c

**Improved Camelia-Flowered Finest Mixed.**—Large, extra double flowers.

Pkt. 10c; ¼-oz. 35c.

**BELLIS—Double English Daisy**

Popular spring and summer flowering perennial; fine for borders; height 4 inches. Easily raised from seed sown from early spring to September; April to September.

**Double Mixed.** Pkt. 10c

**Longfellow.**—Double pink flowers. Pkt. 15c

**Snowball.**—Free flowering; pure white.

Pkt. 15c

**Giant Red or Giant White.**—Mammoth in size; very rare. Give them rich ground.

Pkt. 15c

**BEAN**

**Scarlet Runner.**—The well-known, rapid-growing annual climber, with bright red flowers, from July to September; height 8 feet.

Pkt. 10c; ¼-lb. 20c

Routledge Seed & Floral Co.,

Gentlemen: The plants I received some time ago were very fine and thank you very much. I will send for some seeds before long. I remain

Yours,

MRS. LEM BEISELL.

See Plant Dept., pages 75 to 79

**USE "WONDER."**—The best Fertilizer and plant food known. A teaspoonful to a plant does wonders. See page 38.





Balloon Vine.

**BALLOON VINE (Love-in-a-Puff)**

A rapidly growing annual climber; succeeds best in light soil and warm situation; flowers white; seed vessels look like miniature balloons and of great interest to children; 8 to 10 feet (see cut).

Pkt. 10c; ½-oz. 50c

**BROWALLIA—Amethyst**

A very profuse blooming, half-hardy annual bedding plant, bearing during summer and autumn handsome winged flowers of different shades of blue; 1½ feet.

Finest Mixed.

Pkt. 10c; ¼-oz. 35c

**CALCEOLARIA**

An ornamental plant, and a universal favorite; produces a mass of beautiful puffed, pocket-like flowers of brilliant, self-colors and spotted. Our strains of Calceolaria are very fine.

**Hybrida Grandiflora.**—Flowers of immense size; seeds saved from finest specimens.

Pkt. 35c

**Calendula—Pot Marigold**

Hardy annual; one of the most universal garden flowers. The flowers appear in solitary heads on stout stalks; large, with flat, spreading rays; very showy; flowers the entire season; 1 foot.

**Double Finest Mixed.** Pkt. 5c; ¼-oz. 15c

**Calliopsis**

Showy and beautiful free-flowering annuals, of the easiest culture, doing well in any sunny position, blooming all summer and excellent for cutting and massing (see cut). Don't confuse this with the perennial Coreopsis, page 54.

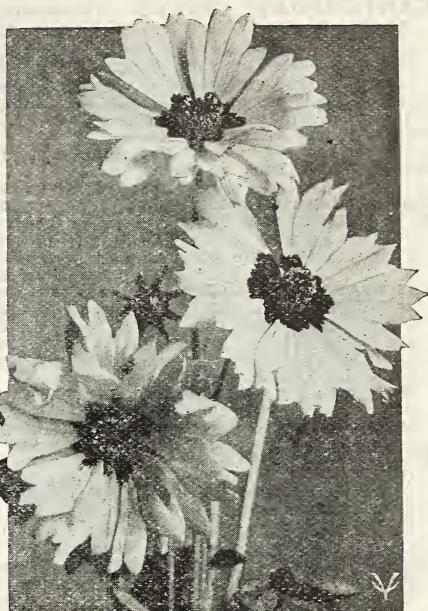
**Finest Mixed.**—Annual; all shades of yellow, red and brown. Pkt. 10c; ¼-oz. 20c

**Hybrida Superba.**—Showy new shades in all of the choicest varieties.

Pkt. 10c; ¼-oz. 35c

**A Beautiful Flower Garden**

Perhaps you have failed before, but if you will follow our "Cultural Directions" (free on request), we are sure you will be successful.



Calliopsis.

**CANNA**

A beautiful, large-leaved, showy flowering plant. Seed must be soaked before planting and started in a hot bed under glass. (For Canna Roots, see page 89.)

**Crozy's Hybrids Mixed.** Pkt. 10c; oz. 35c

**CANARY BIRD VINE**

A rapid-growing summer-climbing annual, 10 to 15 feet high; it will cover trellis work in the most graceful manner, producing hundreds of pretty winged, bright yellow flowers.

Pkt. 10c; ¼-oz. 25c



Canary Bird Vine.

Perennial Flowers are rapidly gaining in favor. **MORE** should be planted; they are beautiful in borders, beds or among shrubbery, and flower each year. You gain 1 year by buying our field grown plants. See pages 80 to 85.



## CANTERBURY BELLS (*Campanula Medium*)

Very ornamental garden plants of easiest culture; excellent for cutting; hardy biennial; 2½ feet high, producing large, bell-shaped flowers of exquisite colors. Hardy biennials. (See plants, page 81.)  
**Single, Finest Mixed, all colors.**

**Pkt. 10c; ⅓-oz. 15c**  
**Single White, Blue or Rose.**

**Pkt. 10c; ⅓-oz. 20c**  
**Double Mixed, all colors. Pkt. 10c; ⅓-oz. 50c**

**R. R.'s PRIZE MIXTURE.**—A mixture which contains every color and kind of both single and double biennial and perennials.

**Pkt. 10c; ⅓-oz. 25c**  
**CALYCANTHEMA (Cup and Saucer Canterbury Bells).**—This is unquestionably one of the finest types; they have an extra large calyx, which is of the same color as the flower, giving the appearance of a cup and saucer.

**Pink, Lilac, Rose or White.**

**Pkt. 15c; 2 for 25c; ⅓-oz. 50c**  
**Mixed Colors. Pkt. 10c; ⅓-oz. 35c**

## Campanula—Bellflower

Well known, beautiful, hardy herbaceous perennials, bearing a great profusion of attractive bellflowers; thrives best in light, rich soil; some of the varieties flower the first season if sown early.

**PERSICIFOLIA GRANDIFLORA (Peach Bells).**—Undoubtedly one of the finest of the hardy Bellflowers; grows 2 to 3 feet high, with large single flowers.

**Blue, White or Mixed. Pkt. 10c; ⅓-oz. 50c**

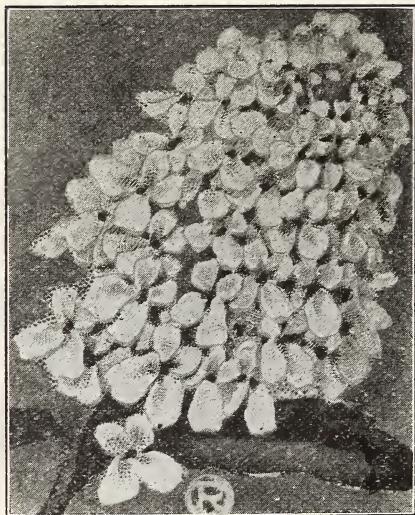
**CARPATICA (Carpathian Mare-Bell).**—Free-flowering, hardy perennial, continuing in bloom the whole season; color clear blue or white; grows 6 inches high; especially good for edging.

**Blue or White. Pkt. 10c; ⅓-oz. 50c**

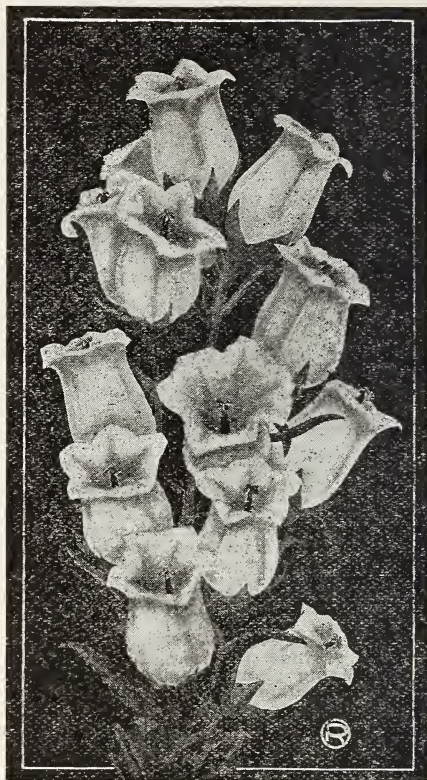
## Candytuft—Iberis

Very popular free flowering annual, fine for beds or cutting; 1 foot. June to frost if sown early and late.

**Empress.**—A large flowered variety of purest white; grown extensively for cut flowers; very desirable. **Pkt. 5c; oz. 50c**



Candy Tuft



Single Canterbury Bells

**Dwarf White Little Prince.**—Grows but 6 inches high and throws up strong trusses of pure white flowers; excellent for edging or bordering. **Pkt. 10c; ⅓-oz. 25c**

**Pink Beauty (Novelty).**—Fine, true pink; an exquisite flower. **Pkt. 10c; ⅓-oz. 25c**

**Crimson or Lilac.**—Very desirable colors; your choice. **Pkt. 10c; ⅓-oz. 15c**

**Finest Mixed, all colors. Pkt. 5c; oz. 35c**

**Sempervirens.**—Perennial; pure white flowers, evergreen foliage; blooms in June; fine for edging, borders and rockeries, 1 foot. **Pkt. 15c; 1-16 oz. 35c**

## Cardinal Climber

This glorious and absolutely distinct new annual climber is undoubtedly the greatest acquisition to the flower world in years, and the most beautiful and brilliant climber ever grown. It is a strong and rapid grower, attaining a height of 25 feet with beautiful fern-like lacinated foliage and literally covered with a blaze of fiery cardinal red flowers from mid-summer to frost. The flowers are about 1 inch in diameter and are borne in clusters of 5 to 7 blooms each. Like all "Ipomoeas" it delights in a warm, sunny situation and good, rich soil. The seed should be soaked in water a few hours before sowing and not planted outside until about May 1.

**Pkt. (15 seeds) 15c; 2 pkts. 25c; ⅓-oz. 75c**





**Centaurea Cyanus.**  
**Bachelor's Button.**

## Carnation

Everyone loves Carnations. For started plants of the finest named varieties, see page 77.

**MARGARET CARNATIONS.**—The earliest to bloom, and producing large, double, sweet-scented flowers; being half-hardy perennials, if they are slightly protected during the winter they will survive and flower profusely the next spring.

**Red, White or Yellow.**—Large flowers.  
Pkt. 15c;  $\frac{1}{8}$ -oz. 50c  
**Choice Mixed.** Pkt. 10c;  $\frac{1}{4}$ -oz. 50c

**CASTOR OIL BEAN.**—See *Recinus*, page 67.

## CELOSIA CRISTATA—Cockscomb

Showy annuals of easy cultivation; 1 foot; producing large, brilliant, comb-like flower heads.

**Glasgow Prize.**—Showy, dark crimson combs. Pkt. 10c;  $\frac{1}{8}$ -oz. 50c  
**Finest Mixed.**—Rich mixture of finest dwarf kinds. Pkt. 10c;  $\frac{1}{8}$ -oz. 40c

## CELOSIA PLUMOSA—Feathered

**Cockscomb**

The plant grows 2 to 3 feet, is of handsome pyramidal form, and the numerous massive plumes, which resemble an ostrich feather waving gracefully above the foliage, make it one of the most effective; of easy culture.

**Thompsoni Magnifica.**—The most perfect in constant bloom from July to November; **Finest Mixture.** Pkt. 10c;  $\frac{1}{4}$ -oz. 50c  
**Golden Plume.** Pkt. 10c  
**Crimson Plume.** Pkt. 10c

## CENTAUREA—Dusty Miller

These are grown for foliage only; half hardy annuals; leaves are silver-coated.

**Candidissima.**—Thick, white, upright cut leaves; 1 foot. Pkt. 10c

**Gymnocarpa.**—Fine, fern-like leaves, very graceful and showy;  $1\frac{1}{2}$  foot. Pkt. 10c;  $\frac{1}{4}$ -oz. 25c

## Centaurea Cyanus

### BACHELOR'S BUTTON, CORNFLOWER.—

Very popular annuals; will grow in the poorest of soil, either on seashore or mountains; seed can be sown either in fall or spring; sandy soil preferable; height, 2½ feet.

**Finest Single Mixed.**

Pkt. 5c; oz. 50c

### CENTAUREA CYANUS fl. pl. (Double Bachelor's Button). Beautiful large double flowers.

**Double Elze.** Pkt. 15c;  $\frac{1}{8}$ -oz. 25c

**Double Mixed.** Pkt. 10c;  $\frac{1}{4}$ -oz. 25c

## Royal Sweet Sultans

**CENTAUREA IMPERIALIS** (Giant Cornflower).—The flowers are of enormous size, fragrant and of charming colors; in form they resemble the fuzzy part of the thistle bloom. In colors from white to red to purple. Excellent for cutting.

**Mixed Colors.** Pkt. 10c;  $\frac{1}{4}$ -oz. 30c

**Marguerite.**—Flowers 4 inches across; purest white. Pkt. 10c;  $\frac{1}{4}$ -oz. 40c

**MOSCHATUS** (Sweet Sultan).—Hardy annual, with very fragrant and showy flowers;  $1\frac{1}{2}$  feet; June to September.

**Finest Mixed.** Pkt. 5c;  $\frac{1}{4}$ -oz. 25c

**SUABOLENS** (Yellow Sweet Sultan).—Very showy. Pkt. 10c;  $\frac{1}{4}$ -oz. 25c



**Chinese Wool Flower.**

## CHINESE WOOLFLOWER

A new annual flower. Very showy, odd and novel. The bunches of wool-like glowing crimson flowers are produced in profusion. Flowers come early and do not fade until hit by frost. Height 2 to 3 feet. Start early and transplant after danger of frost is over. A large bed of these plants certainly produce a magnificent display and will be a dazzling blaze of color from early, until frost.

Pkt. 15c; 2 for 25c; 1-16-oz. \$1.00

We have Annual Flowering Plants in any quantity during April, May and June. See General Price List, page 79.





Cosmos.

**CHRYSANTHEMUM**

These are very showy flowers of easiest cultivation, flowering from July to frost; excellent for cutting; height 2 feet. (For plants, see page 78.)

**Single Annual, Finest Mixed.**

Pkt. 10c; ¼-oz. 25c

**Double Annual, Finest Mixed.**

Pkt. 10c; ⅛-oz. 20c

**Japanese Early Flowering (Double Flowering).**—These flower in the open ground from August to November; splendid plants for show effect; height 3 feet.

Pkt. 15c

**Leucanthemum.**—(See Shasta Daisy, under Daisies, page 57; Plants, page 84.)

**CINERARIA**

**Hybrid Grandiflora.**—We pride ourselves in offering the choicest strain of this gorgeous flower; grand, large blooms in umbel spikes are borne way above the foliage; colors and markings are superb; 1½ feet; tender annual for pots. Pkt. 25c

**Clarkia**

A mighty handsome annual; of easy cultivation; flowers resemble carnations and flower freely; colors, white, crimson, orange shades; 2 feet; July to October.

**Elegans.**—Double mixed. Pkt. 10c; ¼-oz. 25c

**Cobaea Scandens**

Our most popular and rapid climbing annual, flowering the first season. Pretty, purple, bell-shaped flowers appear in great profusion during the fall months; foliage very graceful; 20 feet. Start seed under glass. (For plant see page 79.)

Pkt. 10c; ¼ oz. 25c

**HAVE YOU PETS?**

Note what we have to offer in Kittens, Puppies, Birds, Etc., see pages 151 to 160.

**Cosmos**

Beautiful autumn-blooming plants. They produce thousands of beautiful flowers in pure white, pink and crimson shades, furnishing an abundance of cut blooms for autumn decorations when other flowers are scarce. Can be sown in spring in the open ground, when danger of frost is past, or if wanted early the seed should be started under cover and afterwards transplanted. Set plants not less than 18 inches apart. When about a foot high the tops should be pinched out to induce a bushy growth. They do well almost anywhere.

**EARLY FLOWERING MAMMOTH.**—Claimed to be as large as the Mammoth Perfection and to flower in July and August. If sown early, flowers can be picked in July. Grows 4 feet high; flowers large and beautiful. **Crimson, White, Pink or Mixed.**

Pkt. 10c; ¼-oz. 30c

**KLONDYKE.**—Golden yellow, flowers large and borne on long stems; medium early.

Pkt. 10c

**GIANT PERFECTION.**—Flowers often 4 inches across; plants 7 feet high; blooms do not appear until October. If topped when half grown plants will bloom earlier. **White, Pink, Red or Mixed.**

Pkt. 10c; ¼-oz. 20c

**Pink Lady Lenox**

Gigantic flowers, with wide, overlapping petals of splendid substance, making a perfectly circular flower which is borne on very long stems, in color a beautiful deep rosy pink.

Pkt. 10c; ¼-oz. 25c

**Coreopsis**

**Lanceolata Grandiflora.**—Hardy perennial; with large, showy, bright yellow flowers, produced in the greatest abundance from June till frost. As a cut flower they stand near the head among hardy plants, having long stems and lasting in good condition a week or more. Easily grown from seed, flowering the first year, if sown early under glass. Pkt. 15c; ¼-oz. 25c (See illustration and plants, page 80.)



Cobaea Scandens.

**CULTURAL DIRECTIONS FREE.**—Our 2-page leaflet gives full instructions on growing flowers from seed. Free on request. Read it and be successful.



## CYPRESS VINE

A fast-growing annual vine, with feathery, dark-green foliage and star-like flowers; July to October; 20 feet. Plant early, in light soil and warm location.

Finest Mixed.

Pkt. 10c; ½-oz. 25c

## Dahlia

This very popular flower can easily be raised from seed; started inside in March will produce flowers in August.

**Cactus Mixed.**—Double flowers with pointed petals (see cut page 92). Pkt. 15c

**Double, Finest Mixed.**—Produce flowers of the "Show" or "Decorative Class." Pkt. 10c

**Single Giant Perfection.**—Single flowers of great size and beauty. Pkt. 10c

**DAHLIA BULBS.**—Latest and best. (See pages 91 to 93.)

## Daisies—Shasta Daisy

**SHASTA.**—Very popular and desirable perennial; the large single white flowers are freely produced on long stems. We offer you the best strain in plants or seed. (See cut in Plant Department, page 84.) Pkt. 15c

**DOUBLE DAISIES.**—(See Bellis, page 80.)

## Delphinium—Perennial Larkspur

(See cut, page 81.) Handsome, hardy perennial plants for the herbaceous border and shrubbery, producing a profusion of splendid spikes of flowers throughout the summer. The beautiful, graceful, long stemmed flower spikes make handsome bouquets and last well when cut. If started early will bloom the first season from seed. (For large plants see page 81.)

**R. R.'s Prize Mixture.**—Superb collection of the choicest colors; new, rare and beautiful shades. Makes wonderful cut flower material and should be planted generously. Pkt. 15c; ½-oz. 50c

**Chinese Azureum.**—Branches very freely and produces its flowers in greatest abundance; clear, deep blue; height 3 feet. Pkt. 10c; ½-oz. 15c

**Belladonna.**—Very free and continuous bloomer; delicate and beautiful; clear turquoise blue. Pkt. 25c; 5 pkts. \$1.00

**Formosum.**—Long-spurred, brilliant blue flowers, with white center; 3 feet; July to October. Pkt. 10c; ½-oz. 25c



Dimorphotheca—African Golden Daisy.



Dianthus.

## Dianthus—Garden Pink

All the varieties listed below are very desirable, and will flower the first season, even sown out of doors in May; they flower early and continue throughout the entire summer; they are excellent for cutting, and bedding; 1 foot.

**CINENSIS fl. pl.** (Chinese Pink).—Large, double flowers in unlimited variety of bright colors. Pkt. 10c; ½-oz. 35c  
Finest Mixed.

**HEDDEWIGII.**—(Japan Pink.) Beautiful rich colors. A very popular variety. Pkt. 10c; ¼-oz. 25c  
Finest Mixed.

**FIREBALL.**—New, extra double, brilliant, dark scarlet; very beautiful. Pkt. 10c; ½-oz. 25c

**SNOWDRIFT.** (Lanceolatus).—Extra large, pure white, double, fringed. Pkt. 10c; ½-oz. 35c

**PRIZE MIXTURE.**—Very rich mixture, all kinds. Pkt. 15c; ¼-oz. 50c

**SEMPERFLORENS** (Perennial Hardy Ever-blooming Garden Pinks).—Very beautiful, sweet-scented, double, semi-double and single flowers in great diversity of colors. Pkt. 15c; ½-oz. 35c

## DIMORPHOTHECA AURANTIACA

(African Golden Daisy.) Hardy annual, a great favorite on account of its handsome golden-orange flowers, which are borne most profusely all summer; 15 inches. Does well in dry situations. (See cut.) Pkt. 10c; ½-oz. 25c

Palouse, Wash., Aug. 2, 1918.

Routledge Seed & Floral Co.,  
Dear Sirs: I take pleasure in complimenting you on your beautiful ferns. We have sent for several for ourselves and they are so pretty that our neighbors have asked me to send for some for them, and I will sure try and get all the customers for you that I can.

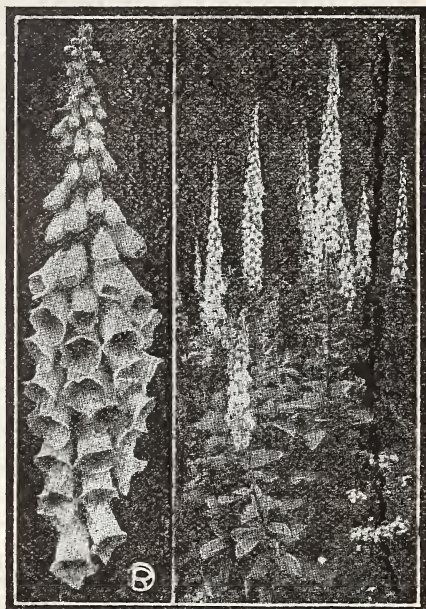
Yours truly,

MRS. THEA SANDERS.

See Plant Dept., pages 75 to 79

**A HEDGE of Free Flowering Dahlias is AS BEAUTIFUL and more showy than a hedge of ROSES.** They are in full bloom when other flowers ARE SCARCE. See pages 91 to 94.





**Digitalis—Foxglove Plant and Flower Spike.**

### Digitalis—Foxglove

Hardy perennials; very desirable for effective massing or grouping; invaluable either in the hardy border, between shrubs or in solid beds; 3 to 5 feet. For strong flowering plants, see page 81.

**Beauty Mixture.**—Comprising all the choicest colors. Pkt. 10c; ¼-oz. 50c

**Gloxinaeflora, Finest Mixed.**—Flowers spotted similar to Gloxinias. White, pink and purple flowers. Pkt. 10c; ¼-oz. 25c

**Gloxinaeflora Rosea.**—Very desirable, flowers rosy pink. Pkt. 10c; ¼-oz. 40c

**Montrosa (Mammoth Foxglove).**—The tall spikes of flowers are surmounted by one monstrous bloom; all colors mixed. Pkt. 10c; ¼-oz. 50c

### DOLICHOS—Hyacinth Bean

Annual climbers; beautiful foliage and clusters of hyacinth-like purple and white flowers, borne in clusters; 10 feet; July to September.

**White or Purple Mixed.** Pkt. 10c; oz. 25c

### Eschscholtzia—California Poppy

One of the most popular garden annuals; 1 foot. Sow the seed where plants are to remain in the fall or early spring. It stands considerable cold and blooms early profusely and continuously until July. Later sowings for late flowers. (See cut.)

**Finest Mixed.**—All shades. Pkt. 5c; oz. 30c

**Californica.**—Bright yellow. Pkt. 5c; oz. 30c

**Alba.**—Pure white. Pkt. 5c; oz. 35c

**Carmine.**—A beautiful rose carmine. Pkt. 10c; oz. 40c

**Golden West.**—Very large, bright yellow flowers with orange centers. Pkt. 10c; oz. 35c

### ECHINOCYSTIS LOBATA

#### Wild Cucumber.

The fastest-growing annual vine in existence; will grow 20 feet in six weeks; pretty foliage and inconspicuous white flowers; soak seed in water over night before planting in dry weather.

Pkt. 10c; oz. 35c



**Echinocystis—Wild Cucumber.**

### Gaillardia—Blanket Flower

Splendid, showy plants for beds or borders; excellent for cutting; the hardy perennial varieties; if sown early will bloom the first season; July to frost; 1½ feet. (Field-grown plants, page 82.)

**Grandiflora Superba.**—Hardy perennial; splendid mixed varieties; in crimson and gold; 2 feet. Pkt. 15c; ¼-oz. 35c

**Lorenziana.**—Hardy annual; double mixed colors; 2 feet. Pkt. 10c; ¼-oz. 25c



**Eschscholtzia—California Poppy.**

**FEED YOUR PLANTS.** You must supply "food," in other words fertilizer, if you want the best results. Read about "Wonder" and "C-M," pages 39 and 40; 20-page "Booklet" free.



## Wild Flower Gardens

Try a packet of our "wild flower garden," something new and interesting to see most every day. See page 73.

### GLOXINIA

Showy free-flowering house plants with rich colored bell-shaped flowers. Tender perennial that need greenhouse culture.

**Hybrida Grandiflora.**—The best strain in existence, embracing all the choicest self-colored, tigered and spotted flowers.

Pkt. 25c

### GOMPHRENA—Globe Amaranth

A dwarf hardy annual, with pretty clover-like beads of purple, white and red flowers; 2 feet; flowers everlasting.

Finest Mixed.

Pkt. 5c; ¼-oz. 20c

### Godetia—Satin Flower

This showy, hardy annual deserves greater popularity. Attractive flowers of satiny texture, from white to all shades of pink and crimson. They grow rapidly, and flower profusely in poor soil; of easy cultivation. Fine for seashore or mountain resorts; 1 foot; July to October.

White, Bright Red or Finest Mixed.

Pkt. 10c; ¼-oz. 35c

### Gourds

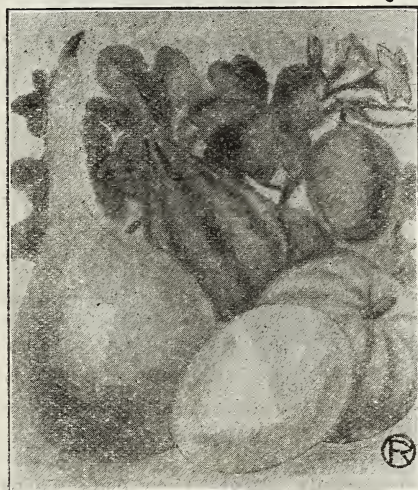
**ORNAMENTAL.**—These are desirable in many places where an immense amount of vine is wanted quickly. Most sorts are good for 20 feet in a season and the blooms of some are quite striking and handsome. With many sorts the fruit is unique and ornamental and often useful. The small fancy gourds are excellent toys for children.

**Calabash.**—The famous pipe gourd, dipper shaped.

Pkt. 10c; oz. 40c

**Egg, Orange, Turk's Turban, Pear, Spoon, or Mixed, all kinds.**

Pkt. 10c; ¼-oz. 15c

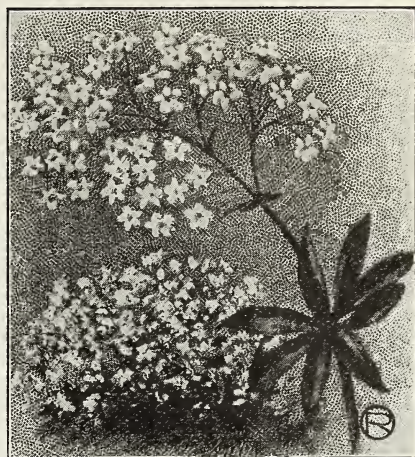


Ornamental Gourds.

### GYNERIUM—Pampas Grass

**Argentum.**—Hardy perennial; the famous pampas grass, with beautiful silvery plumes; 10 feet. (For strong plants, see Pampas, page 83.)

Pkt. 10c



Gypsophila—Baby's Breath.

### Gypsophila—Baby's Breath

Pretty free flowering, elegant plants, succeeding in any garden soil. Their misty white panicles of bloom are largely used for mixing with other cut flowers. The annuals should be sown early in the spring and mid-summer for a continuous supply.

**Elegans Alba.**—Hardy annual, easily grown from seed; flowers pure white; 2 feet; June.

Pkt. 10c; ¼-oz. 25c

**Elegans Rosea.**—Hardy annual; flowers bright rose; very dainty; 2 feet.

Pkt. 10c; ¼-oz. 25c

**Muralis.**—Hardy annual; plants dwarf, about 6 inches; flowers shell pink; fine for borders or rock work.

Pkt. 10c; ¼-oz. 25c

**Paniculata.**—Hardy perennial; one of the finest for cutting; pure white flowers, very small, and borne in large, delicate sprays; June to September; 3 feet.

Pkt. 15c; ½-oz. 25c

(For strong roots of *G. Paniculata* for immediate effect, see page 82.)

**Paniculata Fl. Pl.**—New perennial, double-flowering; most desirable and valuable; pure white.

Pkt. 25c

### Helianthus—Sunflower

The single annual Sunflowers are indispensable for cutting and a bright display of yellow flowers in the garden, borders or among shrubs. Plant early in a sunny place and they will come into bloom early in the summer and keep up a constant supply of flowers until cut down by severe frosts in the fall. We offer some improved types of special merit.

**Globosus Fistulosus** (Globe or Dahlia Sunflower). Flowers large, double, very full in the center and of a rich saffron color.

6 feet. Pkt. 5c; oz. 25c

**Perennial Mixed.**—A choice mixture of the best perennial varieties.

Pkt. 15c

**Cucumerifolius—Stella** (Improved Miniature Sunflower). Grows about 3 feet tall, covered with large single 5 to 6 inch flowers of the purest golden yellow, with black disc.

Pkt. 10c; ¼-oz. 25c

**MORE HARDY FLOWERING SHRUBS** should be planted in the West—they give no trouble, increase in size and grow more beautiful year by year. See pages 100 to 108.





**Helianthus—New Miniature.**

**Orion.**—Artistic and effective new variety of "Stella." The petals are twisted like a Cactus Dahlia. Pkt. 10c; ¼-oz. 25c

**New Miniature Mixed.** A multitude of new varieties have been raised from the popular Miniature Sunflower, which we offer in mixture. They all differ from the parent, most of them being larger, and many with curiously twisted petals. The prevailing colors are pale yellow, golden yellow and creamy white, some with black centers, and all beautiful; for cutting they are indispensable. Pkt. 10c; ¼-oz. 25c

## Heliotrope

Delightfully fragrant, tender perennial; popular pot and garden bedding plant; also for cutting. Some of the best plants may be raised from seed very readily; 1½ feet; start inside or under glass.

**Finest Mixed.** Pkt. 10c; ½-oz. 35c

**MIDNIGHT.**—New; handsome, large flowers, lively shade of purple, variegated with white; foliage beautiful. Pkt. 15c



**Heliotrope.**

## Hollyhocks

Very popular perennials. Easily grown.

**ALLEGHENY.**—Semi-double; mammoth flowers, having the edges of the petals finely fringed and lacinated; will bloom the first year if sown early. Choiceest Mixed Colors. Pkt. 10c; ¼-oz. 40c

**DOUBLE GERMAN EVER-BLOOMING.**—Will bloom the first year from seed, if sown early. Pkt. 10c; ¼-oz. 40c

**NEW ANNUAL EVER-BLOOMING.**—This is one of the best introductions of late years. Seeds sown in the house in March will produce flowers in July on plants 4 feet high; the plants do not attain their perfection until their second year, when they grow 7 to 10 feet high, and flower continuously from June till frost.

**Single Mixed.** Pkt. 10c; ¼-oz. 25c

**Double Mixed.** Pkt. 15c; ¼-oz. 50c

**CHATER'S IMPROVED.**—Our strain of this is the best that can be produced; seeds saved from the most double flowers.

**White, Pink, Crimson, Yellow, Lilac or Mixed.** Pkt. 10c; ¼-oz. 65c

## HOLLYHOCK

PLANTS IN  
ALL COLORS  
OFFERED ON  
PAGE 82.



**Hollyhock.**

## HUNNEMANNIA

**Fumariaefolia** (Giant Yellow Tulip Poppy.)  
—Hardy annual; foliage fern-like; flowers tulip-shaped, golden yellow; very showy; July to frost. Pkt. 10c; ¼-oz. 25c

**HUMULUS.**—See next page.

## IPOMOEA—Moonflower

**Grandiflora Alba.**—Large, heart-shaped leaves, and large, pure white flowers, which open only late in the evening; 10 feet. Pkt. 15c



**Humulus—Japanese Hop**

Hardy annual climber; of rapid growth; attains a height of 12 feet.

**Japonica Variegata.**—Foliage green and white; very pretty and effective; not affected with insects. Pkt. 10c; ¼-oz. 25c

ENGLISH HOP ROOTS.

Each 15c



**Humulus—Japanese Hop.**

**KOCHIA—Tricophylla**

**Summer Cypress or Burning Bush.**—Annual; forms dense bushes of upright plumage-like foliage; during the summer they remain light green and in early fall they change to carmine and blood red; 2 feet; makes a dainty and showy hedge or nice single specimens. Pkt. 10c; ¼-oz. 25c

**KUDZU VINE—Pueraria Thumbergiana**

To this must be awarded first place as the fastest growing hardy climbing plant. It will grow 8 to 10 feet the first year from seed, and after it has become established there seems to be no limit to its growth, 50 feet in a single season being not unusual. Its foliage is large and covers well; it bears small racemes of rosy purple; pea-shaped blossoms towards the close of August. A splendid subject for covering permanently verandas, etc.

Pkt. 10c; ¼-oz. 25c

**Larkspur**

These are splendid, hardy annuals, which, when grown in beds or borders, make a pleasing effect, and the slender flower stalks, when cut, are most desirable for vases; July to October.

**Double Dwarf Rocket.**—1 foot; compact growing bush; splendid spikes of double flowers in all colors.

Mixed. Pkt. 10c; ¼-oz. 25c

**Giant Hyacinth Flowered.**—3 feet; fine, compact spikes of beautiful flowers.

Mixed. Pkt. 10c; ¼-oz. 25c

**Emperor.**—Tall, slender spikes of exquisite double flowers in unlimited quantity and of delicate shades; 3 feet.

Mixed. Pkt. 10c; ¼-oz. 25c

**PERENNIAL LARKSPUR.**—(See Delphinium, page 57; plants, page 81.)

**LATHYRUS LATIFOLIUS**

**Perennial Sweet Pea.**—Free flowering, hardy perennial climbers, bearing beautiful flowers all season.

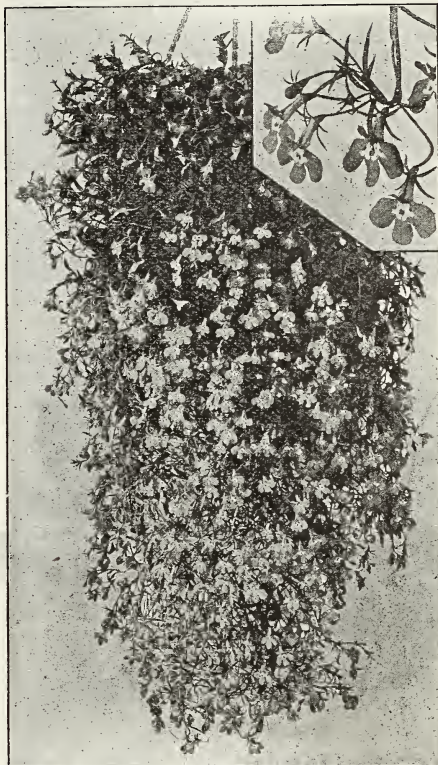
White or Pink.

Mixed.

Pkt. 10c; ½-oz. 40c

Pkt. 10c; ½-oz. 35c

**FLOWERING PLANTS.**—During the months of April, May and June we have thousands of choice, well-grown plants. See page 79.



**Trailing Lobelia**

**Lobelia**

**Erinus Gracilis.**—Trailing bright blue flowers; excellent for vases, hanging baskets and window boxes. Pkt. 10c; ½-oz. 25c

**Hybrida Sapphire (New.)**—This is by far the most beautiful trailing Lobelia to date; very large, deep sapphire blue flowers, with a large and clear white eye; very free and early flowering; extra long trailer, for baskets and boxes. Pkt. 25c

**Crystal Palace Compacta.**—Little dwarf bedding plant; dark blue flowers cover the whole plant during the entire season; very compact and used extensively in carpet bedding or edging; height 4 inches. Pkt. 15c; ½-oz. 50c

**White Gem.**—Compact little plants, covered trailer, for baskets and boxes. Pkt. 10c

**Cardinalis (Cardinal Flower.)**—Hardy perennial, with spikes of deep cardinal red flowers; August and September; 3 feet. Pkt. 15c

**BUY a package of WONDER ODORLESS FERTILIZER and feed your plants according to directions. YOU WILL BE PLEASED at the results. See page 38.**



**LUPINUS**

Ornamental, free-flowering, easily grown, with long, graceful, upright spikes of rich and variously colored pea-shaped flowers; valuable for mixed borders and beds.

**Annual Dwarf Mixed.**—Valuable for cutting; 2 feet. Pkt. 10c; ¼-oz. 25c

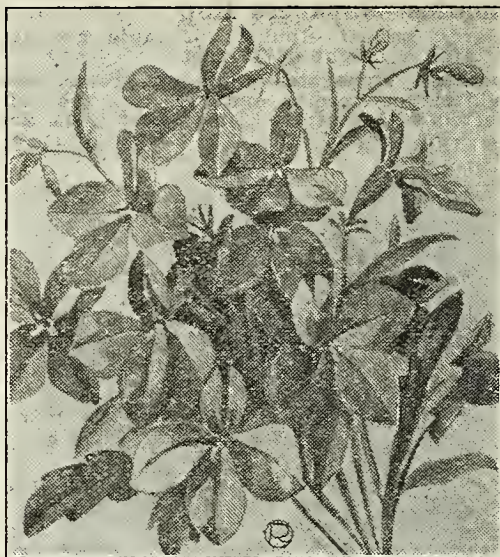
**Polyphyllus Mixed.**—Showy perennials, growing stout and erect; good for cutting; flowers in great variety of colors; 3 to 4 feet; May and June.

Pkt. 10c; ¼-oz. 25c

**MARVEL OF PERU—Four o'Clock**

Hardy annual, flowering from July to October; brilliant colors; 3 feet.

**Finest Mixed.** Pkt. 10c; oz. 25c



*Lobelia Compacta*, page 61

**Mignonette—Reseda**

A universal favorite; very fragrant; no home garden is complete without Mignonette. It needs a cool soil only moderately rich; grows 6 to 12 inches high and is treated as a half-hardy annual; sown treated as a half-hardy annual. (See cut.)

**Grandiflora.**—Large-flowering, sweet, fragrant, spikes of greenish yellow color.

Pkt. 5c; oz. 15c

**Defiance.**—Giant spikes; flowers abundant and very fragrant.

Pkt. 10c; ¼-oz. 15c

**Machet Red.**—Excellent for pots or garden; highly colored, fragrant flowers.

Pkt. 10c; ¼-oz. 25c

**White Pearl.**—New; the best white flower very attractive.

Pkt. 10c; ¼-oz. 35c

**Our 2-page**

Leaflet,  
"HOW TO  
GROW FLOW-  
ERS FROM  
SEED,"  
Free on  
Request



*Mignonette—Flower Spikes*.



*African Marigold*.

**Marigold—Tagetes**

Widely grown, hardy annuals; invaluable for bedding and producing an elegant display of yellow, orange and brown flowers from early summer till frost.

**Mammoth African, Finest Mixed.**—Very large and double, orange-yellow flowers; 2 to 3 feet.

Pkt. 10c; ¼-oz. 25c

**Double French.**—Flowers double, brown-red and golden-yellow; very rich and pretty.

**Tall or Dwarf Mixed.** Pkt. 10c; ¼-oz. 25c

**MESEMBRYANTHEMUM**

Dwarf trailing plants of great beauty, blooming the whole summer, thriving best in a dry, loamy or sandy soil; hardy annuals; 12 to 15 inches.

**Tri-color.**—Very dainty, pointed petaled, salmon pink flowers.

Pkt. 15c

**Crystallinum (Ice Plant).**—Flowers white; prized for its singular icy foliage.

Pkt. 15c

**MIMULUS**

**Moschatus (Muskplant).**—A pretty, trailing plant with small yellow flowers, giving forth a musk-like fragrance; fine for hanging baskets, etc. Annual.

Pkt. 15c

**GLADOLI BULBS** make a beautiful display when in bloom and are of the easiest culture and really not expensive, as they multiply rapidly. See pages 88-89.



## MORNING GLORY—Ipomoea

The tall varieties are popular, well known, rapid-growing climbers of the easiest cultivation; very fine for covering arbors, trellises, porches, etc.; give them rich soil and a warm situation. The Minor or dwarf varieties flower very freely and do not require support.

**Convolvulus Major.**—Tall, choice, single mixed; all colors. Pkt. 10c; oz. 25c

**Convolvulus Minor.**—Dwarf mixed. Pkt. 10c; oz. 20c

**Imperial Japanese Fringed.**—These have very large fringed flowers in a great variety of the most exquisite colorings; handsome foliage. Pkt. 10c; oz. 25c

**Double Mixed.** Pkt. 10c; oz. 50c

**Choice Prize Mixture.**—This is a mixture of both American and Japanese varieties; very choice. Large Pkt. 10c; oz. 25c

(Note.—Soak the Japanese Morning Glory seed in warm water for 24 hours before planting.)

## Myosotis—Forget-Me-Not

Few spring flowers are more admired than the lovely Forget-Me-Nots, which are especially effective when grown in masses. Perennials and hardy if given slight protection through the winter. Seed may be sown any time from spring till mid-summer. The Alpestris and Dissitiflora come into bloom in April, and are largely used for bedding or borders in connection with spring-flowering bulbs, Pansies, etc. The Palustris sorts do not bloom till May, but continue till fall. Perennial plants, pg. 81.

**Dissitiflora.**—Rich blue; early flowers in fine sprays; 6 inches. Pkt. 15c; 1/8-oz. 50c

**Alpestris Victoria.**—Of bushy habit; bearing large, double, bright blue flowers; yellow eye; very fine; 6 inches. Pkt. 10c; 1/8-oz. 35c

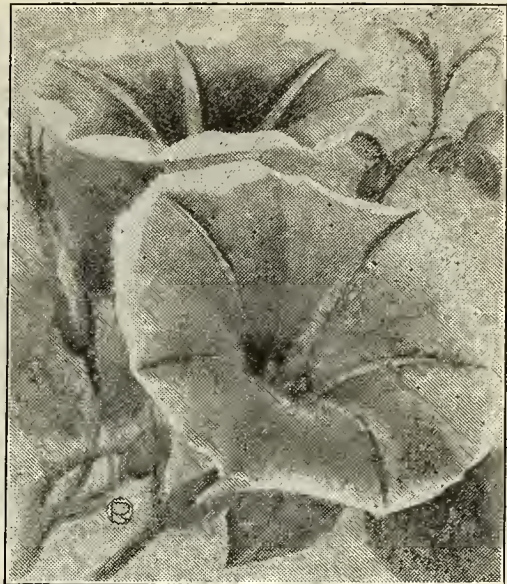
**Alpestris Royal Blue.**—Rich indigo blue. 9 inches. Pkt. 15c; 1/8-oz. 35c

**Finest Mixed.**—A mixture of blue, rose and white varieties. Pkt. 10c; 1/8-oz. 20c

**Palustris Semperflorens.**—Perennial; flowers bright blue; blooms from early spring until autumn. Pkt. 15c; 1/8-oz. 75c



Myosotis—Forget-Me-Not.



Morning Glory.

## NEMESIA

**Grandiflora Compacta Triumph.**—A very pretty, half-hardy, free-flowering annual; the plants grow about a foot high and the beautiful, dainty flowers are very varied in color, including rose, yellow, blue, orange, etc. An ideal bedding plant. Seed sown in the autumn makes beautiful pot plants for early spring blooming. Mixed Colors. Pkt. 15c; 1/8-oz. \$1.00

## NICOTIANA

One of the easiest annuals to raise and one of the most effective. The blossoms in shape are not unlike a Petunia blossom but with a longer tube. The flowers open toward evening and emit a powerful perfume.

**Affinis (Tuberose-flowered Tobacco).**—Delightfully sweet-scented, pure white, tubular flowers, blooming continually; annuals; 2 to 3 feet. Pkt. 10c; 1/4-oz. 35c

**Affinis Hybrida.**—Splendid hybrids in blue, red and rose, etc., shades. Pkt. 10c

**Sanderae.**—A lovely hybrid Tobacco of elegant branching habit, and bearing on light graceful stems great quantities of very beautiful rosy carmine flowers; a valuable border plant, remaining decorative from summer to autumn. Pkt. 10c

## NIGELLA—Love in a Mist

**Damascena.**—A compact, free flowering plant with finely cut foliage, curious looking flowers and seed pods; hardy annuals; blue and white; 1 foot. Mixed colors. Pkt. 10c; 1/8-oz. 15c

**Miss Jekyll.**—A lovely variety with cornflower blue blossoms; splendid for cutting. Pkt. 10c; 1/8-oz. 25c

## HOUSE PLANTS

Don't overlook the beautiful Ferns and Palms that we offer on pages 74 and 75. The small sizes go safely by mail and are very pretty.

**PERENNIAL FLOWERING PLANTS**—By buying our strong field grown plants you save time and get a profusion of flowers the first season. See pages 80-85.





Nasturtium—Trailing.

For permanent and hardy climbing flowering vines and trailers, see pages 106 and 107.

## Nasturtium—Tall Climbing

The most popular and most beautiful annual climbing vines. We offer only the finest strains, producing the largest and richest flowers.

- Asa Gray.**—Yellowish white; very fine.  
**Black Prince.**—New; very dark.  
**Crown Prince.**—Rich blood red.  
**Golden Queen.**—Very fine yellow.  
**Margaret.**—Yellow, spotted red and yellow.  
**Primrose.**—Cream, brown spots.  
**Regina.**—New salmon shade.  
**Spitfire.**—Bright fiery scarlet.

Your choice, Pkt. 10c; full collection, 3 kinds, 50c; per oz., any kind, 25c.

**TALL PRIZE MIXTURE.**—This is undoubtedly the finest mixture of tall Nasturtiums offered anywhere; every shade is grown separately and then mixed.

Large Pkt. 10c; oz. 25c; ¼-lb. 75c

**Tall Choice Mixed.**—A very fine selection of beautiful varieties.

Large Pkt. 10c; oz. 20c; ¼-lb. 60c

**IVY-LEAVED, FINEST MIXED.**—The ivy leaves, borne on very slender stems, are of a dark metallic color, which forms a striking contrast to the beautiful flowers; an excellent variety for cases, hanging baskets, etc.

Pkt. 10c; oz. 25c

**VARIEGATED QUEENS.**—A new strain of tall Nasturtiums having beautifully variegated leaves; green, white and yellow; flowers large and of many bright colors.

Superb Mixed.

Pkt. 10c; oz. 25c

## Dwarf Nasturtiums

**B. B.'s DWARF BEAUTY MIXTURE.**—Composed of new and rare sorts; exceedingly brilliant and beautiful.

Large Pkt. 10c; oz. 25c; ¼-lb. 75c

**Choice Dwarf Mixed.**—Not equal to above, but far superior to most mixtures.

Large Pkt. 10c; oz. 20c; ¼-lb. 60c

**GOLDEN MIDNIGHT (New Dwarf).**—A novelty of real merit. From an artistic point of view the contrast between the light foliage and extremely dark flowers is most remarkable. The foliage is light yellow, variegated, while the flowers are deep crimson, almost black hence the name "Golden Midnight."

Pkt. 10c; oz. 25c

## DWARF NASTURTIIUMS

- Aurora.**—Reddish orange, veined carmine.  
**Beauty.**—Yellow and scarlet; very pretty.  
**Empress.**—Deep crimson; extra dark leaved.  
**Golden King.**—A rich golden yellow.  
**Regelianum.**—Deep purplish crimson.  
**Vesuvius.**—New salmon red; very beautiful.  
 Price, all above Dwarf varieties, Pkt. 10c; 6 for 40c; per oz. 25c.

## PENTSTEMON—Beard Tongue

The handsome, brilliant flowers are borne on long terminal spikes, much resembling Gloxinias. Perennial; will bloom the first season if sown early; 3 feet. All colors from yellow to red and purple. See cut.)

Hybrida Mixed.

Pkt. 10c



Pentstemon.

**GROW "PRIZE FLOWERS" by using "WONDER ODORLESS FERTILIZER." But do not use TOO MUCH, it is very RICH. See page 38.**



## Giant Pansies

This popular flower thrives best on a cool, moist, but well-drained soil enriched with well-rotted barnyard manure or fine ground bone. Seeds sown early will produce fine plants for summer blooming. The florist's method, though, is to sow in July or August and protect the plants during the winter, and they will flower continuously early the following spring and summer.

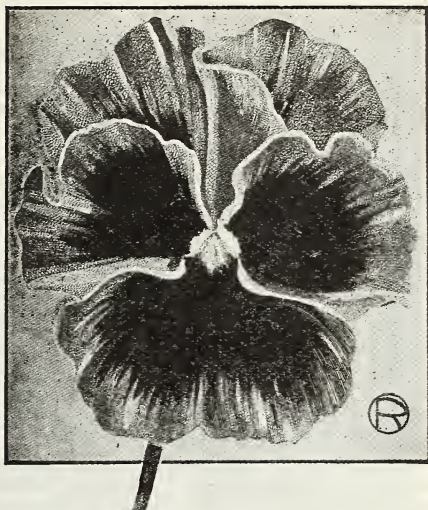
**EXHIBITION PRIZE MIXTURE.**—For variety of markings, beauty of form, size and splendid texture, this superb strain cannot be excelled. Florists and gardeners will be pleased with this magnificent strain. **Pkt. 25c; 1/8-oz. \$1.50**

**Steele's Mastodon.**—This superb strain is becoming famous among professional florists everywhere. Flowers rare and rich in colors and of giant size; Oregon grown. **Mixed, Pkt. 20c; 1/8-oz. \$1.25**

**Giant Trimardeau.**—The most popular bedding strain for this locality, and deservedly so, on account of the strong, sturdy plants and the enormous flowers of the greatest variety of colors; Oregon grown. **Finest Mixed, Pkt. 15c; 1/8-oz. 75c**

**English Show.**—A magnificent strain; very large flowers; great diversity of colors. **Pkt. 10c; 1/8-oz. 60c**

**Choice Mixed.**—A fine bedding strain. **Pkt. 5c; 1/8-oz. 35c**



Our new product, "C-M," Dry-Kiln Pulverized Cow Manure, is the ideal fertilizer for your Pansy beds. (See page 39.) It makes those giant flowers you admire.

## New Giant Flowering Pansies. Collection, 1 pkt. each of the 10 kinds, \$1.60

**Black Giant.**—Nearly all are jet black; some very dark purple. Rare and rich; immense size. Very effective if planted with pure white or yellow. **Pkt. 20c**

**Bronze Mastodon.**—Very large—all shades from bronze to gold, many wonderfully shaded. A color always in demand. **Pkt. 20c**

**Giant White.**—Mammoth, pure white with a dark center. **Pkt. 20c**

**Madame Steele.**—"Elks Purple." A deep, rich royal purple of giant size. **Pkt. 20c**

**Grand Duke.**—The finest and largest all-white pansy in the world. **Pkt. 20c**

**Madame Perret — Frilled.**—Very distinct, frilled or ruffled, edged white, body color wine pink and red, beautifully veined. **Pkt. 20c**

**Golden Queen.**—Pure yellow, grand form and size; the finest yellow strain. **Pkt. 20c**

**Meteor.**—A beautiful pure wine red, profuse bloomer. A favorite for borders. **Pkt. 20c**

**New Adonis.**—A giant light blue. **Pkt. 20c**

**Prince Henry.**—A splendid dark blue of immense size. The best blue. **Pkt. 20c**



Phlox Drummondii

PINK.—(See Dianthus, page 57.)

## Phlox

**Drummondii.**—This is the large flowering, hardy annual phlox. Easily grown from seed. Their brilliantly colored flowers make a magnificent display through a long season. Give them a sunny position and light soil. Excellent for mass beds or borders. One foot high.

**Grandiflora Mixed.**—All colors. **Pkt. 10c; 1-oz. 35c**

**Alba.**—Pure white. **Pkt. 10c; 1/8-oz. 25c**

**Coccinia.**—Bright scarlet. **Pkt. 10c; 1/8-oz. 25c**

**Leopoldi.**—Rose, white eye. **Pkt. 10c; 1/8-oz. 25c**

**HARDY PERENNIAL PHLOX (Decusata).**—These rank among the finest herbaceous perennials for beds and borders; mixture of the finest colors; 3 feet. (See plants, page 83. **Pkt. 10c; 1/8-oz. 25c**

**PLANTS.**—Large flowering, choice pansy plants, ready very early in the spring. Can be safely sent by mail. See page 79.



## Petunia

One of our easiest cultivated and freest flowering annuals. Will succeed almost anywhere and give a continuity of the most brilliant bloom from June till killed by frost. The strains we offer are the very choicest obtainable.



**Ruffled Giant Single Petunia.**

## SINGLE PETUNIAS

**Ruffled Giants Prize Mixture.**—This strain produces in great profusion enormous flowers, having edges of petals beautifully ruffled and fluted; of great variety of colors, many being beautifully veined; very showy and attractive.

**Pkt. 35c; 1,000 seeds \$3.00**

**Dwarf, Large-Flowering, Fringed.**—A new dwarf selection of the most beautiful ruffled and fringed type; compact, free-flowering plants; excellent for bedding or pots. **Pkt. 25c**

**Large-flowered, Finest Mixed.**—Fine, large flowers in superb mixture. **Pkt. 15c**

**Fine Mixed.**—An assortment of medium-sized flowers; fine for bedding. **Pkt. 10c; 1/8-oz. 25c**

## DOUBLE PETUNIAS

All of our Double Petunias are selected with greatest care, and contain as large a percentage of double flowers as it is possible to obtain.

**Giant Double, Finest Mixed Hybrids.**—An exceptionally fine strain; remarkable for the large, beautifully colored double flowers. **Pkt. 50c; 500 seeds \$4**

**Giant Double Mixed.**—Fringed, unsurpassed. **Pkt. 35c; 500 seeds \$2.50**

**Choice Double Mixed.** **Pkt. 25c; 500 seeds \$1.50**

## Portulaca

Low-growing or creeping tender annual, six to eight inches high, and bearing glossy, cup-shaped blossoms in very brilliant and gorgeous colors. The foliage and stems are thick. The seed germinates slowly and should be started under glass or when the weather is hot. These flowers love the sunshine and do best on rather dry ground; excellent for embankments.

**Single, Finest Mixed. 1/4-oz. 35c; Pkt. 10c**

**Double, Finest Mixed. 1/8-oz. 50c; Pkt. 15c**



**Single Portulaca**

## Poppy—Papaver

Universal favorite of the easiest culture. They produce a wealth of the most beautiful and showy blooms. Both perennial and annual poppies bloom the first year from early-sown seed. Perennial varieties will, but annuals will not transplant safely, therefore sow the annuals where they are to remain and thin out, giving each plant ample room to grow and develop.

**King Edward.**—New annual of gorgeous coloring; deep scarlet shaded; each petal marked with a big black blotch; yellow anthers; flowers large and freely produced; 2 1/2 feet. **Pkt. 10c; 1/4-oz. 25c**

~~~~~  
**POPPY COLLEC-  
TION**  
One Packet  
Each 6 An-  
nual Kinds  
only 35c.  
~~~~~

## POPPY—CONTINUED

**Admiral (Annual).**—A single variety of surpassing beauty; large flowers of glistening white, with a broad band of brilliant scarlet around the top; produce a magnificent effect. **Pkt. 10c; oz. 50c**

**Miss Sherwood (Annual).**—Single, bears large flowers of a satiny white, shaded a silky chamois rose, a combination of rare delicacy. **Pkt. 10c; oz. 50c**



## Poppy — Continued

**Shirley (Annual).**—Charming Poppies. Flowers single and semi-double, and range in color from the purest white through the delicate shades of pale pink, rose and carmine to the deepest crimson and blood-red, while many are daintily edged and shaded. The petals are like silk. Free blooming and fine for borders or beds;  $1\frac{1}{2}$  to 2 feet. Mixed. Pkt. 10c; oz. 40c

**Carnation Flowered (Annual).**—Splendid double fringed flowers. Mixed Colors. Pkt. 10c; oz. 50c

**Annual Superb Mixture.**—A superior strain, containing the choicest of single and double varieties in all of the brightest colors. Pkt. 5c; oz. 40c

**CALIFORNIA POPPY.**—(See Eschscholtzia, page 58.)

**ICELAND, OR NUDICAULE (Perennial).**—These are of a very graceful, neat habit, with bright green, fern-like foliage, formed in tufts, from which issue slender stalks, about 12 inches in height, bearing beautiful brilliant single flowers in endless profusion, and most useful for cutting. (For plants, see page 82.)

Yellow, White, Scarlet. Pkt. 10c  
Single Mixed. Pkt. 10c; 1-oz. 35c

**Double Iceland Mixed.**—Very choice. Pkt. 15c;  $\frac{1}{8}$ -oz. 50c

**ORIENTALE BRILLIANT.**—This is the most gorgeous perennial Poppy, flowering in June and July, with enormous vivid scarlet blossoms. Pkt. 10c;  $\frac{1}{4}$  oz. 50c

**Oriental Princess Victoria Louise.**—Salmon pink; very silky and delicate. Pkt. 15c

**Oriental Psyche.**—Delicate rosy blush. Pkt. 15c

## Primula—Primrose

The first two varieties named below are hardy, early-blooming, garden plants, and the others beautiful winter-blooming house plants. Their various forms and blending of colors are exceedingly pleasing and effective. They thrive best in a rich, loamy soil.

**POLYANTHUS (Veris Mixed).**—Early blooming, dwarf growing plants, valuable for outdoor bedding and edging, 8 inches, perennial. (See plants, page 83.) Mixed. Pkt. 10c;  $\frac{1}{8}$ -oz. 35c

**VULGARIS (Veris Aureau).**—Yellow, common, English Primrose; hardy garden variety; perennial; 8 inches. Pkt. 10c;  $\frac{1}{8}$ -oz. 35c

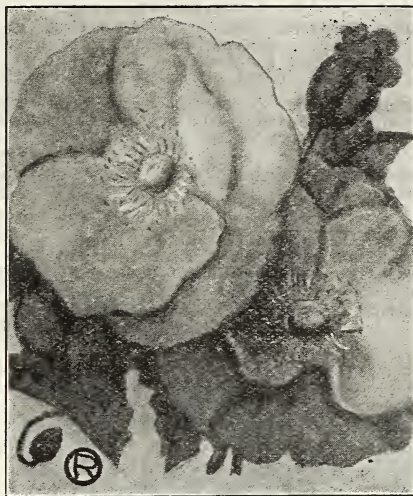
**Obconica Grandiflora Hybrids.**—A lovely, profuse bloomer, bearing beautiful clusters of single flowers; for pots only. Pkt. 15c

**Sinensis or Chinese Primrose.**—Beautiful, large, fringed flowers; especially fine for winter and spring flowers in the house; free bloomers.

Finest Mixed. Pkt. 25c

## PYRETHRUM—Golden Feather

**Aureum.**—Half-hardy perennials, grown as annuals; valuable for edging, as their yellow foliage makes a fine contrast with other bedding plants; 6 inches. Pkt. 10c



Shirley—Poppy.

## Ricinus—Castor Oil Bean

A magnificent and highly ornamental plant, with picturesque foliage and stately growth, combined with brilliant colored fruit of the giant varieties. Grown as single specimens on lawns and on pleasure grounds, they form a striking feature; hardy annuals.

**Zanzibarensis, Mixed.**—Very ornamental; dark bronzy green and red leaves; 8 to 10 feet high. Pkt. 10c; oz. 35c

**Sanguineus Tricolor.**—Blood red stems, deep green leaves, with red veins; 6 feet. Pkt. 10c; oz. 35c

**Gibsoni.**—New dark red foliage; 5 feet. Pkt. 10c; oz. 35c

Finest Mixed.—All kinds. Pkt. 10c; oz. 25c



Ricinus (Castor Beans).



**RUDBECKIA—Cone Flower**

**Bicolor Superba.**—Fine free-flowering annual variety; 2 feet; producing in great abundance on long stems its bright yellow double flowers. (Plants, 83.) **Pkt. 10c**

**Fulgida.**—Hardy perennial sort, producing in masses during August and September brilliant orange-yellow flowers; 3 feet. **Pkt. 10c**

**Newman.**—Perennial; large, bright orange-yellow flowers. **Pkt. 15c**

**SALPIGLOSSIS**

Produces very showy, funnel-shaped flowers of large size; fine for beds; half-hardy annuals.

**Grandiflora Mixed.**—Large-flowering. **Pkt. 15c; 1/8-oz. 25c**



Salvia.

**Salvia—Scarlet Sage**

The Scarlet Sage has long been a favorite bedding plant, bearing long spikes of brilliant scarlet flowers in great profusion from July till frost; seed should be sown as early as possible, either indoors or in a hotbed, and the young plants transferred to their flowering quarters when the weather has become settled and warm.

**Splendens Compacta.**—A splendid showy variety, with large spikes of bright rich scarlet flowers; 3 ft. **Pkt. 10c; 1/4-oz. 75c**

**Zurich.**—New dwarf, of special merit; very early. Brilliant, free flowering; 15 to 18 inches. **Pkt. 20c; 1/8-oz. 75c**

**Bonfire.**—Of dense compact growth; useful for bedding or borders. Flowers dark scarlet, on spikes which stand clear of the foliage and attract attention at once; 2 ft. **Pkt. 20c; 1/8-oz. 75c**

**SCHIZANTHUS—Butterfly Flower**

Beautiful garden annuals; flowers charmingly fringed and delicately colored; 1 to 2 feet. Blooms quickly from seed.

**Grandiflora Mixed.** **Pkt. 10c**



Stocks.

**Stock—Gilliflower**

By far one of the most popular annuals for garden or greenhouse culture. They are superb for cutting and are of great value to florists for bouquet work. Flowers are of delicious fragrance, large, mostly double, and borne on handsome spikes. While all will flower the first year, the winter stocks will last for 2 years. They are very hardy and often remain in bloom in the yard all winter in the vicinity of Portland. Sow early and transplant.

**LARGE-FLOWERED TEN WEEKS.**—A splendid double-flowered strain, especially adapted for bedding and pot culture; pyramidal spikes of brilliantly colored flowers; 1 1/2 feet. **Pkt. 10c; 1/8-oz. 50c**

**Finest Mixed.**

**GIANT PERFECTION, OR CUT-AND-COME AGAIN.**—Grown for us by experts and the greatest possible care is taken in the selection of good seed. Of branching habit, two feet, and 85 to 90 per cent of large, double flowers; fine for cutting.

**White, Light Blue, Crimson, Dark Blue, Pink, Yellow, or Finest Mixed.** **Pkt. 15c; 1/8-oz. 60c**

**BEAUTY OF NICE.**—A handsome, new winter and summer stock of quick growth; flowers of large size, double, and freely produced; 2 feet. **Pkt. 15c; 1/8-oz. 60c**

**Princess Alice.**—Double white. **Pkt. 15c**

**Queen Alexandra.**—Soft rosy lilac. **Pkt. 15c**

**Beauty of Nice.**—Delicate flesh pink. **Pkt. 15c**

**SUNFLOWER.**—(See *Helianthus*, page 59-60.)

**Sweet William**

Hardy biennial, widely grown for the handsome, showy heads of brilliant flowers from June to September; 1 1/2 feet.

**Double Finest Mixed.** **Pkt. 15c**

**Mammoth Single Mixed.** **Pkt. 10c**

**PERENNIAL FLOWERS** are rapidly gaining in favor. **MORE** should be planted; they are beautiful in borders, beds or among shrubbery, and flower each year. See pgs. 80 to 84.



**SCABIOSA—Morning Bride**

Elegant, hardy annual; fine for cutting and bedding; flowers quite large and very showy, blooming freely during summer and autumn; 2½ feet. All colors.

**Finest Mixed.** Pkt. 10c; ¼-oz. 35c  
**White.**—Large flowers. Pkt. 10c; ¼-oz. 35c

**SHAMROCK—True Irish**

This is the genuine Shamrock, and is gathered by a connoisseur on the native land.

**Pkt. 25c**

**SNAPDRAGON.**—(See *Antirrhinum*, pg. 52.)

**OUR LEAFLET, "How to Raise Flowers Successfully from Seed,"** is free and is **OF REAL VALUE.**

**THUNBERGIA**

Extremely pretty yellow flowers with dark eye; rapid-growing annual trailers; used largely for vases, window boxes, etc.; will flower all summer till frost; 5 feet.

**Finest Mixed.** Pkt. 10c; ¼-oz. 30c

**TRITOMA—Red Hot Poker**

Striking and exceedingly ornamental autumn flowering plant. Showy flower spikes, shaded red and yellow; 3 feet. (See cut and plants, page 84.)

**Pkt. 10c**

**VALERIANA—Garden Heliotrope**

A fine old-fashioned hardy plant; flowers have a strong heliotrope odor; showy, red or white; fine for bouquets; 2 feet.

**Mixed.** Pkt. 10c

**Sweet Peas of Highest Quality**

Some others may have as good, but none any finer Sweet Pea Seed than we. The new orchid-flowered or **Spencer types** are the latest, and well worth the higher price asked. Those who have tried the true "new Spencers" will never be satisfied again with the old types.

**OUR SWEET PEA SPECIAL****Superb 1919 Collection****of 7 Giant Spencers****75c Collection for 50c**

We have put up, in one large, beautifully lithographed envelope, seven distinct and new **Giant "Spencers"**; each kind in a separate packet and properly marked. The seed in each packet will plant a row 3 to 4 feet or a total of 20 to 30 feet. With good care and cultivation these will produce thousands of blooms which you can pick in separate shades; an ideal way for special effect.

This collection contains our leaflet "**How to Grow Prize Sweet Peas,**" and one full-sized packet of the following distinct and popular colors:

**White Spencer**—A large, pure white.  
**Margaret Atlee**—Beautiful pink.  
**Edrom Beauty**—Rich salmon-orange.  
**King Edward**—Large crimson scarlet.  
**Asta Ohn**—A beautiful lavender.  
**Mrs. Rontzahn**—A lovely apricot-pink.  
**Othello Spencer**—Rich maroon red; large and free-flowering.

**Note.**—For full description see classification under "Separate Colors," pages 71 and 72.

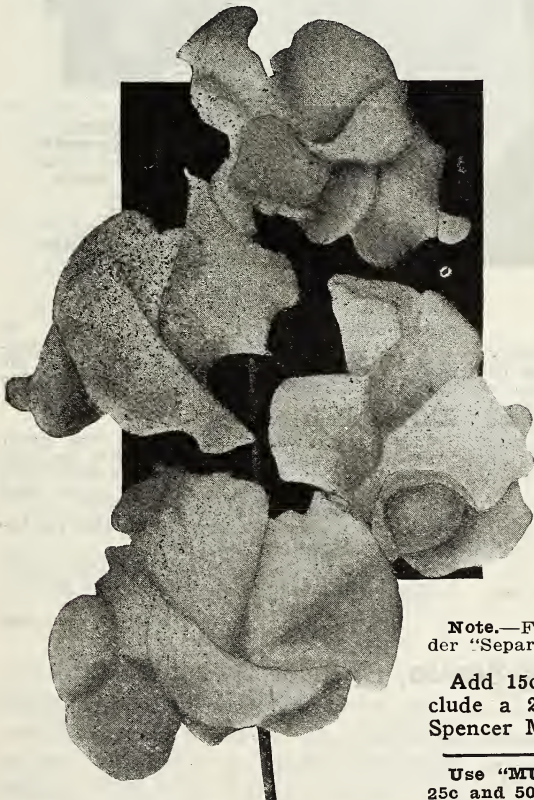
Add 15c Extra or 65c in all and we will include a 25c packet (1 oz.) of R. R. Superb Spencer Mixture. (Described below.)

Use "**MULFORD'S CULTURE**" for Sweet Peas, 25c and 50c sizes. (See page 39.)

**R. R.'s Superb Mixture of Giant Spencer Sweet Peas**

This is our own special mixture and is composed only of the best giant orchid-flowering wavy Spencer varieties, also contains some new seedlings of promising merit, that have not as yet been named. For healthy, robust growth, wealth of blooms, size of flowers and exquisite and rare colorings, this mixture is unequalled.

Put up and for sale in sealed packages only, ½-oz. pkts., 15c; oz. pkts., 25c each; 3 for 60c; 6 for \$1.00.





## SWEET PEAS—Continued

### 1919 Prize Collection of Spencers

**Rare, Rich and Wonderful**  
Collection Price, 8 Lovely Kinds  
(value \$1.00), **ONLY 75c.**

#### Fiery Cross

The beautifully waved and fluted flowers are borne freely on long stems. Color a scorching fire-red, or scarlet, without any shading and which scintillates and glitters in bright sunlight, thus adding a glowing fire-like sheen which radiates over the flower.

**Pkt. 15c; oz. 75c**

#### Robert Sydenham

This new Sweet Pea is a magnificent glowing, brilliant orange. The large flowers come four on a stem, well placed and beautifully waved. The vines are of vigorous growth, blooming profusely.

**Pkt. 15c; oz. 60c**

#### Constance Hinton

A new, very hardy variety claimed to be the largest White Spencer to date. The buds are tinted with pink, but as the flower develops the pink fades out, leaving a beautiful, large, pure white. Black seed, strong vitality.

**Pkt. 10c; oz. 50c**

#### Hercules

A magnificent soft rose-pink self, of truly giant proportions, undoubtedly the best of its class. A flower of great substance with broad spreading and beautifully waved standard.

**Pkt. 15c; oz. 60c**

#### R. F. Fenton

Undoubtedly the best of the lavender varieties, grand for exhibition and garden decoration; strong grower, gives plenty of fours. The individual flowers are very large and refined; the color is a rich clear lavender.

**Pkt. 15c; oz. 60c**



**BEFORE  
PLANTING  
Treat Your  
Pea Seeds  
With  
MUL-  
FORD'S  
CULTURE**  
Page 41.

#### Barbara

Salmon-colored self of large size. It makes a "telling" bunch either for exhibition or table decoration, and is most effective.

**Pkt. 10c; oz. 60c**

#### Elfrida Pearson

The flowers are of extra large size, great substance, and produced in fours on long stems and in wonderful profusion. Color lovely pink throughout; the buds and flowers tinted with salmon-pink.

**Pkt. 15c; oz. 50c**

#### Senator Spencer

Beautiful large flowers, claret and chocolate on light ground; distinct and greatly admired; a profuse bloomer.

**Pkt. 10c; oz. 40c**

### Early Flowering, Long Season, Spencer Sweet Peas

This new class was first introduced in 1917. They are the best Sweet Peas for the florist to force under the glass for early blooms and very desirable for the garden in many sections where the season is too hot and dry for the regular later flowering "Spencers." Can be planted early or late and come into flower quickly. Especially recommended for the Southern States and the Orient. We do not believe they will ever replace our magnificent giant Spencers, in the Pacific Northwest.

We have secured true seed from the introducers and offer six choice varieties:

**Early Peace.**—Large, rich cream pink.  
**Early Liberty.**—Large, sunproof crimson.  
**Early Melody.**—Beautiful, deep pink.  
**Early Flowering Mixed.**—Very fine.

**Lavender King.**—Giant, true lavender.  
**Sweet Erier.**—Distinct, lovely soft salmon.  
**Early Song Bird.**—Splendid light pink.  
**Early Snowstorm.**—Grand pure white.

**PRICE.**—Your choice, 25c per pkt. Collection of all eight for \$1.35



## Up-to-Date Spencer Sweet Peas of Real Merit—Continued

No seed house offers a more select list. We classify under colors for your convenience  
**SPECIAL**—Make up your own collections—60c worth for 50c; \$1.25 for \$1.00

### WHITE

**CONSTANCE HINTON.**—See Novelties, page 70.

**ETTA DYKE.**—One of the largest and most exquisitely formed pure white Spencers. Beautifully waved; color absolutely pure. Pkt. 10c; oz. 40c

**KING WHITE.**—Well and truly named; it certainly is "the king" of all white Sweet Peas. In color, size and beauty of flower, length of stem and vigor, King White is unsurpassed. Pkt. 10c; oz. 60c

**NORA UNWIN.**—Large, pure white, exquisitely crinkled wavy petals, four or more flowers to the stem. Pkt. 10c; oz. 35c

**WHITE SPENCER.**—A pure white, of large size and splendid substance; long, strong stems. Pkt. 10c; oz. 40c

### YELLOW—PRIMROSE

**DOBBIE'S CREAM.**—We consider this the best deep cream or primrose colored variety; nicely waved, abundance of four-bloom sprays and most floriferous. Strong and vigorous. Pkt. 10c; oz. 50c

**PRIMROSE SPENCER.**—A pronounced primrose or creamy white; excellent flower. Pkt. 10c; oz. 40c

### PINK ON CREAM

**MARGARET ATLEE.**—This new, charming variety is one of the finest pink yet introduced. The giant flowers are rich, rosy salmon pink on creamy buff, a bright yet delicate pink, immense wavy standards and wings inclined to double. Pkt. 10c; oz. 50c

**MRS. HENRY BELL.**—Giant flowers of finest form. A most charming rich pink on cream. Magnificent. Pkt. 10c; oz. 50c

### LIGHT PINK

**ELFRIDA PEARSON.**—See page 70.

**MRS. HUGH DICKSON.**—One of the best light pink to date. A European variety of sterling merit. Pkt. 10c; oz. 40c

**MRS. RUTZAHN.**—A lovely combination of apricot and pink. Beautiful, large wavy flowers. Pkt. 10c; oz. 40c

### PINK

**HERCULES.**—See "Novelties," page 70.

**COUNTESS SPENCER.**—Flowers extremely large, beautifully expanded, crumpled and waved. Color soft shell pink, deeper at the outer edges. Pkt. 10c; oz. 35c

**MRS. A. IRELAND.**—The form is beautiful; petals waved and crinkled. The extra large long-stemmed flowers are very attractive; the best rosy pink. Pkt. 10c; oz. 50c

### LAVENDER

**ASTA OHN SPENCER.**—Color a beautiful lavender; flowers large, wavy and generally come four blossoms to the stem. Very popular. Pkt. 10c; oz. 40c

**FLORA NORTON SPENCER.**—A beautiful shade of light blue or lavender; very desirable. Pkt. 10c; oz. 35c

**E. F. FENTON.**—See "Novelties," page 70.

### ORANGE AND SALMON

**NOTE.**—To get the most delicate shade in this color, flowers should be lightly shaded.

**DECORATOR.**—The color is old rose with a sheen of terra cotta giving a bright orange effect. The placement and poise of the flower is perfect. Pkt. 10c; oz. 50c

**EDROM BEAUTY.**—The bold, majestic flowers are a rich, deep salmon orange. An excellent grower, producing fours in abundance. Pkt. 10c; oz. 40c

**ILLUMINATOR.**—Very distinct and pronounced; rich, glowing cerise-salmon, suffused bright orange, rich and glistening, large, perfect flowers in profusion on long stems. Pkt. 10c; oz. 50c

**ROBERT SYDENHAM.**—"Novelty," page 70.

**THOMAS STEVENSON.**—The flowers, of largest size and finest Spencer type, are of an intense flaming orange throughout. A grand exhibition variety. Unsurpassed in color and beauty. Pkt. 10c; oz. 50c

### DARK RED—MAROON

**OTHELLO SPENCER.**—Free bloomer, flowers very large and of a rich deep maroon. Pkt. 10c; oz. 35c

**KING MANOEL.**—A giant-flowered maroon or deep chocolate colored variety that is sure to give pleasure to all who admire these rich shades. The flowers are of perfect form and borne in magnificent sprays of three and four. Pkt. 10c; oz. 45c

### PICOTEE—BI-COLOR Shaded and Striped

**AMERICA SPENCER.**—Bright and attractive; white striped bright red; very pretty. Pkt. 10c; oz. 35c

**SENATOR SPENCER.**—See "Novelties," pg. 70.

**WINNIFRED DEAL.**—A most beautiful variety; pure white with a very distinct picotee-edge of rose-pink. The general effect is light and dainty. Pkt. 10c; oz. 60c

**PRIZE SWEET PEAS**—If you want to grow giant flowers on long stems, you must give your sweet peas good soil, plenty of water at the roots in dry weather, some Wonder Fertilizer, and pick the flowers often. Our "leaflet" tells all—free with each order. Use "C. M." in the Sweet Pea trench. See pages 38-39.



## Up-to-Date Spencer Sweet Peas of Real Merit—Continued

No seed house offers a more select list. We classify under colors for your convenience  
**SPECIAL**—Make up your own collections—60c worth for 50c; \$1.25 for \$1.00

### SCARLET—CRIMSON

**FIERY CROSS.**—See "Novelties," pg. 70.

**KING EDWARD SPENCER.**—Of vigorous growth, profuse bloomer, giant flowers; most popular scarlet; long stems. **Pkt. 10c; oz. 40c**

**MAUD HOLMES.**—An English introduction and superior to others in this color. Elegant form and type and a beautiful crimson scarlet, giant, wavy flowers, four to a stem. **Pkt. 10c; oz. 50c**

**VERMILION BRILLIANT.**—An intense pure scarlet self-color of rare beauty and substance. Absolutely sunproof. A stocky, vigorous grower, profuse bloomer; the long, strong stems carry four perfect flowers. **Pkt. 10c; oz. 40c**

~~~~~  
 Treat your Sweet Peas with **MULFORD'S CULTURE**; makes stronger vines, more and larger flowers. (See page 41.)  
 ~~~~~

### BLUE—PURPLE

**NEW MARGARET MADISON.**—Flowers clear azure blue self—a color that always attracts and is so effective. **Pkt. 10c; oz. 50c**

**ROYAL PURPLE.**—A recent novelty of great merit. A true, rich, royal purple that holds its color. Flowers of giant size and elegant form, very beautiful bunched with white. **Pkt. 15c; oz. 60c**

**WEDGEWOOD.**—Flowers true light blue in color and of fine large full wavy form, some duplex. **Pkt. 10c; oz. 35c**

### Prize Winners

Tillamook, Oregon, March 1, 1918.

Routledge Seed & Floral Co.,

Gentlemen: I wish to tell you that the Mulford's Culture I used last year with the Sweet Pea seed proved entirely satisfactory. The Peas were prize-takers at the County Fair.

Yours very truly,

MRS. M. A. WHEELER.

Bellingham, Wash., April 3, 1918.

Routledge Seed & Floral Co.,

Gentlemen: Entered at Fall show here four Sweet Peas—King White, Othello, Spencer, Hercules and R. F. Fenton. Won first on last two names. All your seed. Have you something new and choice?

Yours very truly,

MISS BLANCHE E. BAYLOR.



For Mulford Culture, page 41

### Cupid Sweet Peas

Compact dwarf plants, not over six or seven inches high. Flowers of good size and substance. For edgings, low beds and pot culture they are unique and pretty.

**Mixed, Pkt. 10c; oz. 25c; ¼-lb. 75c**

### Rose City Mixture of Grandiflora

Extraordinary care has been taken in the selection of the varieties and the quantities of each to make up the mixture, and the result is one that cannot fail to excite the admiration of every flower lover. Of course the flowers of the Grandiflora type are not as large as the "Spencers," but the range of color is complete and they are hardy and very free flowering.

**Large pkt. 5c; oz. 15c; ¼-lb. 45c; lb. \$1.25**

**QUALITY and TRUENESS** is what makes the price in Sweet Peas. Low prices never bought "HIGHEST QUALITY" Seeds. Use Mulford's Culture; see page 41.



## Verbena

One of the finest annual bedding plants and also suitable for borders, baskets and window boxes; its heads of brilliant-colored flowers produce one mass of bloom throughout the summer. (See cut.)

**NEW GIANT.**—The most beautiful and remarkable variety yet introduced.

**Hybrida Mixed.**

**Pkt. 20c**

**MAMMOTH.**—A carefully selected and improved strain. The trusses and individual flowers are of the largest size, of brilliant colors; free blooming and of vigorous habit.

**Mammoth White, Scarlet, Rose, Purple or Mixed.**

**Pkt. 15c; ¼-oz. 50c**

**FINE MIXED.**—A choice mixture of large-flowering sorts.

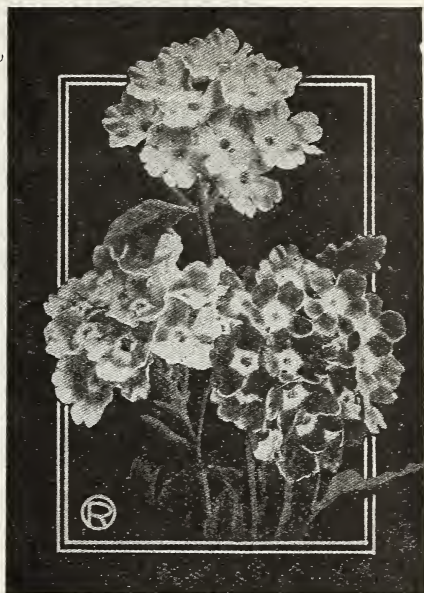
**Pkt. 10c; ¼-oz. 25c**

## Violet

*Viola Odorata* is the well-known English Violet, a free-flowering, hardy perennial; easily grown from seed, though somewhat slow in germinating; succeeds best in partially shaded moist places.

**Odorata.**—Blue or White.

**Pkt. 15c**



Verbena.

**WILD CUCUMBER.**—(See *Echinocystis*, pg. 58.)

## WALLFLOWER

Very highly prized, old-fashioned plants, grown largely for their fragrance; half-hardy perennial varieties; 1½ feet.

**Single Finest Mixed.**

**Pkt. 10c**

**Double Tall Branching, Finest Mixed.**—Fragrant; 3 feet.

**Pkt. 10c**

## Zinnia—Youth and Old Age

The plants come quickly from seed and make a fine display in a bed or border. Each flower lasts for several weeks, and the plants bloom abundantly until destroyed by frost; 2½ and 3 feet; annual.

**MAMMOTH.**—White, Golden, Yellow, Scarlet or Flesh; 3 feet.

**Pkt. 15c; ¼-oz. 50c**

**ROBUSTA GRANDIFLORA.**—A very choice selection of the largest showy varieties.

**Double Mixed.**

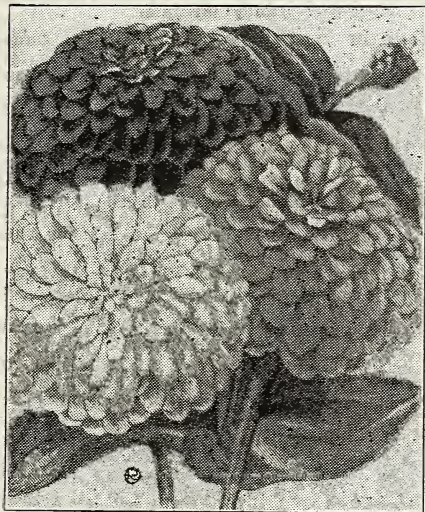
**Pkt. 15c; ¼-oz. 40c**

**Tall Giant, Double Mixed.**—Elegant strain, comprising all colors; 3 feet.

**Pkt. 10c; ¼-oz. 25c**

**Dwarf Double Mixed.**

**Pkt. 5c; ¼-oz. 25c**

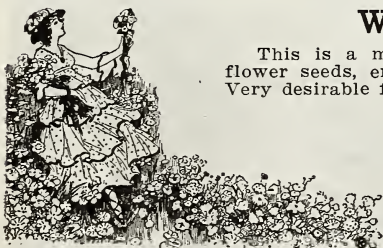


Zinnia.

## Wild Flower Garden—Mixture

This is a mixture of easy growing, hardy annual and perennial flower seeds, embracing a wide range of different kinds and colors. Very desirable for sowing broadcast along walks, shrubbery, pathways, roadways or in the garden. With little or no care they will produce a bright effect and furnish an abundance of flowers for cutting. If you wish to get the largest returns plant in a prepared bed and when the plants are a few inches high, transplant here and there or wherever wanted. You will derive a great amount of pleasure from watching the development of the flowers from the unknown plants.

**Prices.**—Well filled pkts., 10c; oz. 35c.





## BEAUTIFUL ORNAMENTAL FERNS

A home, no matter how lavishly furnished, is not complete without decorative plants and palms.

The bold, majestic palms and delicate, feathery foliage of the ferns lend a grandeur and magnificence that cannot be obtained in any other way.

**READ THIS.—Specimen Plants**—These are large, choice, well shaped plants, growing in pots, and are very beautiful. **They cannot be mailed.** We wrap and pack carefully and ship by express at your expense.

**OSTRICH PLUME** (See cut)—The fronds of this popular variety are the most delicate and plume-like. They are beautiful, full and fluffy, well-grown plants; are truly magnificent and last well in the house. **Choice plants, 25c to 35c, post paid; specimen plants in pots, \$1.00 to \$2.00; extra large, \$2.50 to \$3.50.**

**BOSTON FERN**—One of the most beautiful and useful of house plants. It is of easy culture, and its sword-like fronds, in large specimens, attain a length of 3 to 4 feet, produced in a bewildering mass, arching, curving and interlacing in every conceivable direction.

**Choice plants, 25c to 35c, post paid; specimen plants in pots, 75c to \$1.00; \$1.50 and up to \$3.50.**

**ASPAGUS SPRENGERI** (Emerald Feather) (See cut No. 1)—This is undoubtedly one of the handsomest and most valuable evergreen trailing plants for the house and conservatory ever introduced. It is especially valuable for pots, vases, baskets, etc., covering all with its beautiful sprays of lovely green, feathery foliage; quite hardy and valuable for hanging baskets or porch boxes in summer if given partial shade and plenty of water.

**Choice plants, 20c to 30c, post paid; specimen plants in pots, 35c to 75c; extra large pots or baskets, \$1.50 to \$2.50.**

**ASPAGUS PLUMOSUS** (Climbing Lace Fern) (See cut No. 3)—A finer and more delicate plant than the Sprengeri, but hardy and easily grown. Very satisfactory for window and house culture. An extremely graceful window climber, bright green, feathery foliage, as fine as the finest silk or lace.

**Choice plants, 20c to 35c, post paid; specimen plants in pots, 35c to \$1.25.**

### Filled Fern Dishes

These are pretty, popular, fashionable and very desirable for center pieces for the tea or dinner table or as ornamental plants on the sideboard or center tables.

**A choice collection of plants in pretty matt green dishes, \$2.00 to \$3.00. In fancy dishes, \$2.50 to \$3.50. (See cut No. 2.)**

**NOTE**—Must go by express; cannot be mailed.



Specimen plant, Ostrich Plume Fern, in a fancy jardiniere

**MAIDEN HAIR FERN** (*Adiantum Cuneatum*)—A very beautiful and graceful fern. **Small plants, 25c postpaid; choice plants in pots, 35c to \$1.00 each.**

### Choice Table Ferns

These handsome little ferns are used mostly in filling fern dishes, your choice of the following **20c each; 3 for 50c, post paid.**

**Aspidium Tsussimense** — Without question the most valuable of all ferns yet introduced for fern dishes; of strong but dwarf and graceful habit.

**Crytomium Falcatum** (The Holly-Leaved Fern.)—One of the most desirable, very hardy and pretty.

**Pteris Argylea** (Silver Fern)—A very showy fern, with variegated foliage.

**Pteris Wilsoni**—A very pretty and useful fern; green leaves with the ends very peculiarly crested; beautiful sort for fern dishes.

**Pteris Cretica Albo-Lineata**—A pretty and useful variegated variety distinctly showing the clear white variegation. A useful and easily grown fern.



No. 1, Asparagus Sprengeri No. 2, Filled Fern Dish No. 3, Asparagus Plumosus



## PALMS AND DECORATIVE POT PLANTS

Every one knows how beautiful palms and decorative plants are, and how much they improve the parlor, hall or dining room. We offer here only the best and most desirable kinds of the easiest culture.

Note.—Plants in pots cannot be mailed. See note top opposite page.

### ARAUCARIA EXCELSIA

(Norfolk Island Pine)—This beautiful plant resembles the pine somewhat in appearance, though much finer in texture; it is particularly adapted to parlor table decoration. It is most unique in appearance, the branches being arranged in neat, symmetrical whorls. They do not require much sun, and are hardy and easily cared for. (See cut No. 5.) Choice plants in pots, 15 to 18 in., \$2.50; 18 to 24 in. and up, \$3.00 to \$4.00. Note.—No smaller mailing sizes this year.



No. 4, Aspidistra. 5, Araucaria Excelsior. 6, Kentia Palm.

**KENTIA** (See cut No. 6) — A beautiful, graceful, handsome-looking, strong-growing palm, with deep green, crisp foliage; inclined to dwarf and spreading habit. One of the most popular for house culture, as they are very hardy, and stand the dry atmosphere. If we could have but one palm, it would be a Kentia. (See cut.) Small plants, 12 to 15 in., 75c to \$1.00, postpaid. Choice plants in pots, 18 to 24 in., \$1.50 to \$2.50; specimen plants, \$5.00 to \$25.00.

the grace and lightness of Cocos Weddelliana, but is more robust in growth and has ten-fold the foliage of that fine variety. Foliage from the ground up, gracefully recurved and spreading in habit. It will be most popular for house decoration. Choice plants in pots, \$1.00 to \$2.00; specimens, \$2.50 to \$5.00.

**RUBBER PLANT** (*Ficus Elastica*) (See cut No. 8)—This is certainly one of the best plants grown for decorative purposes. It succeeds well with ordinary treatment. Its glossy, thick, dark-green leaves are not affected by dust or gas. Small plants, postpaid 60c.

Choice plants in pots, not mailable, 15 to 18 in., \$1.00 to \$1.50; 2-foot up, \$2.00 to \$5.00 and up.

**DRACAENA INDIVISA** (Fountain Plant)—This plant is unsurpassed for hardiness. Leaves graceful, long, narrow and pointed, used extensively for centers in pots, boxes or urns with other plants. Perfectly hardy outside in summer.

Nice plants, 12 to 15 in., 35c to 50c, postpaid; specimens in pots 13 to 24 in. and up, 60c to \$1.50 and up to \$2.50.

**ASPIDISTRA** (See cut No. 4)—Stately decorative house plant of rapid and hardy growth. The leaves grow quickly from the ground to a height of 18 inches or more. Will stand more gas, dust, cold and heat than any other palm we know of. We have both green and variegated green and white.

Green or Variegated Leaves, fine specimens, in pots, \$1.50 to \$3.00 and up. Small plants, postpaid, 50c to 75c.

**PHOENIX ROEBELENI** (See cut No. 7)—A new palm. One of the most graceful and the hardiest. The horticultural world has enthused over this beautiful palm. It has

### COCOS WEDDELLIANA

(See cut No. 9) — The most elegant and graceful of all the smaller palms. Its slender, erect stem is freely furnished with its graceful arching leaves of rich green color. Small plants are very desirable for centers in fern dishes. Choice plants, 12 in., 50c to 75c, postpaid.

**Jardinieres, Etc.**—We have a full line of standard and new styles Jardinieres, Pots, Japan Tubs, Etc.



No. 7, Phoenix. 8, Rubber Plant. 9, Cocos Palm.

## CANARY BIRDS

Did you ever hear an imported Hartz Mountain Canary Sing? They are the sweetest singers on earth. See page 153.



## FLOWERING PLANT COLLECTIONS

On this and the two following pages we offer plant collections grown especially for our out-of-town customers. All orders for these plants are sent direct to the greenhouse where they are gathered, packed and wrapped with special care so they will travel in safety by parcel post. Every plant is carefully labeled. Order any time; we'll send "in season."

### Twelve Grand Single Geraniums

Price 15c each; set of 12 varieties, \$1.25 postpaid.

**Albion.**—Beautiful free flowering white variety as pure in color as driven snow. Always in bloom.

**C. W. Ward.**—Rich salmon shaded to orange. Large trusses on strong stalks. Magnificent zoned foliage.



**Eugene Sue.**—A rare shade of russet orange, the nearest to a yellow geranium.

**Jacquerie.**—Rich, vivid crimson; immense trusses. Excellent for bedding; blooms freely, stands the sun well.

**Mad Chapotan.**—Beautiful pink upper petals, marked with white; very pretty.

**Madame Mosnay.**—Peculiar shade of carmine lake shaded to violet and white.

**Maxine Kavolenski.**—Odd shade of orange red, very distinctive, splendid bedder, vigorous, handsome, a dependable sort.

**Mildred Rival.**—Pure rose-pink, with conspicuous white blotch on two upper petals; flower beautifully formed, and the largest of its color.

**Mrs. E. G. Hill.**—Very large trusses; color, clear salmon, with a white center; one of the finest varieties.

**Mrs. A. Blanc.**—Silver salmon, shaded peach; glistening texture.

**Mme. Cibiel.**—Light salmon flesh color bordered orange. Grand trusses of very large florets.

**Nuit Poitevine.**—Fine, large flowers, lower petals rich violet, bordered with scarlet, upper petals orange scarlet, very distinct.

### Twelve Grand Double Geraniums

Price 15c each; set of 12 varieties, \$1.25 postpaid.

**Abbie Schaefer.**—Beautifully formed flowers of a rich crimson scarlet of velvety texture. A grand sort.

**Alphonse Ricard.**—Rich velvety scarlet, extra large and brilliant.

**Edmond Blanc.**—Deep carmine red tinged

**Madame Charlotte.**—Rosy salmon shaded and reticulated with white; very distinct.

**Madame Landry.**—Rich bright apricot, shaded with orange, very large trusses. One of the best.

**Madame Recamier.**—Ivory white flowers in very large trusses. Strong, healthy grower.

**Marquis de Castellane.**—Rich solferino color. Immense trusses on strong stalks. Robust grower and very free blooming.

**Mrs. Gladstone.**—Snow-white shaded to flesh pink in center; superb fancy sort.

**Mrs. Lawrence.**—Lovely satiny pink shaded to white. Its delicate color is delightful. A grand bedding variety.

**S. A. Nutt.**—The best of the rich, dark crimson varieties; very popular.

### Lady Washington Collection English Show Pelargoniums

These are commonly known as Lady Washington Geraniums. Like geraniums they flower during the summer months and are very ornamental either as house or bedding plants.

Price 25c each; set of 6 sorts, \$1.25 postpaid.

**Countess.**—Very large flowers of a distinct shade of cerise salmon color; upper petals splashed with maroon.

**Crimson King.**—Superb dark colored variety. Flowers rich crimson, blotched and feathered maroon. Very free flowering and easy growing.

**Easter Greeting.**—A new free blooming variety of the greatest merit. Flowers amaranth red with a well outlined maroon blotch on each petal. Blooms very large and in good sized trusses.

**Mabel.**—Delicate light pink, upper petals feathered and blotched maroon. Elegantly fringed flowers of great substance.

**Madam Vibert.**—Of very sturdy growth, bushy habit and free blooming. Flowers bright red, blotched black and maroon and edged with light pink and white. One of the most admired.

**Fair Maid.**—Delicate light pink shaded to white, with maroon blotch and crimson markings on upper petals. One of our finest sorts.

**USE "WONDER"**—The best Fertilizer and plant food known. A teaspoonful to a plant does wonders. Descriptive pamphlets on request. See page 38.

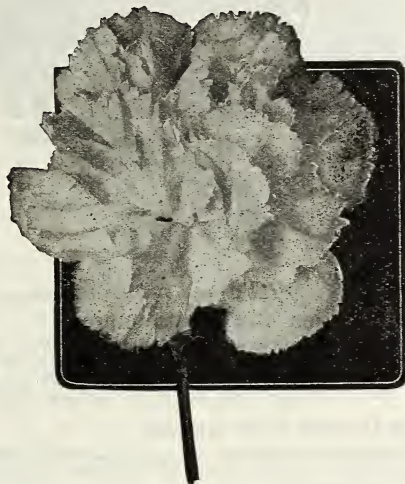


## Ever-Blooming Carnations

For beauty, fragrance and abundance of flowers, for its hardiness, easy culture and adaptability to outdoor or indoor cultivation, no plant excels the ever-blooming Carnation, or, as so frequently called, the Pink, rivaling the Rose in beauty of colors and shades, equalling in perfume and even excelling it in profusion of flowers.

### Gorgeous Collection Giant Carnations

Price, 20c each; set of 7 sorts, \$1.00 postpaid



**Alice Coombes.**—Flowers large, round and full; color a delicate flesh pink, with a very strong clove fragrance; has excellent keeping qualities.

**Bella Washburn.**—Flowers large, with finely fringed petals. Strong stems holding the flowers erect. Color, rich dazzling scarlet. A true ever-bloomer.

**Gorgeous.**—A giant among Carnations. Flowers finely fringed, of elegant form with high center. Color, rich ruby-carmine shaded to velvety scarlet.

**Matchless.**—A wonderful new white. Large massive flowers on strong upright stems. Sweetly perfumed.

**Pink Sensation.**—Very free flowering. Flowers very large. Color, soft medium rose-pink, of a delicate and pretty shade.

**Princess Dagmar.**—The largest and best of its color, a bright dazzling crimson. Always in bloom.

**Yellowstone.**—Vigorous growing, free flowering. Color canary yellow, lightly splashed with pink. A gem among fancy carnations.

### Enchantress Collection Everblooming Carnations

Price, 15c each; 12 for \$1.25 postpaid

**Alice.**—Delicate flesh pink, very sweet.

**Bonora.**—White flaked with scarlet.

**Beacon.**—A brilliant, deep scarlet.

**Enchantress.**—A superb flesh pink.

**Herald.**—Large, bright scarlet, fringed.

**Lady Bountiful.**—Pearly white; fringed.

**May Day.**—Soft pink with silvery sheen.

**Mrs. C. W. Ward.**—Bright, glistening pink.

**Pocahontas.**—Bright, rich crimson.

**Philadelphia.**—Rose-pink, fragrant.

**Victory.**—Best intense scarlet.

**White Enchantress.**—A beautiful white.

Dungeness, Wash., April 20, 1918.

Routledge Seed & Floral Co.,

Dear Sirs: I received the Pansies this A. M. as per order. I wish to say thank you. They are certainly the best I have seen.

Fraternally yours,

A. M. FREDERICK.

John Day, Oregon.

Routledge Seed & Floral Co.,

Dear Sirs: I received the plants and other things that I ordered from you and I was more than pleased. I think the plants were the best that I have received and I have sent to several companies.

MRS. NANNIE STONE.

## Beautiful Flowering Begonias

15c each, full collection of 6 for 75c postpaid

Probably the most satisfactory class of plants for house culture obtainable. Of easiest possible culture, their waxy flowers produced in much profusion together with their handsome foliage make them most desirable subjects for the window garden.

**Argentea Guttata.**—Handsomeness erect growing sort, with pointed wine-colored leaves with silvery white spots. Pure white flowers.

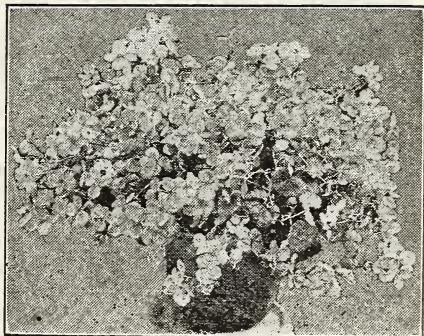
**Bertha Chaterscher.**—The freest-flowering Begonia we have; glossy green leaves and bright scarlet flowers.

**Gloire de Chatelaine.**—Glossy ovate green leaves, covered the year around with beautiful pink flowers; a fine window plant.

**Marguerite.**—Bronzy green, with purple cast; large trusses of cream and rose-colored flowers.

**Marjorie Daw.**—A strong growing variety of slender habit with glossy green foliage and producing large racemes of salmon pink flowers, drooping gracefully about the plant.

**President Carnot.**—Strong growing, large-leaved sort, with pendulous clusters of deep pink flowers during a large part of the year.



Begonia—Gloire de Chatelaine.



## Queen Collection Japanese Chrysanthemums

Price, 15c each; sets of 10 sorts, \$1.25 postpaid.

**Artistic Queen.**—Fine exhibition variety. Extra large blooms, loosely incurved, very strong stem. Color, rose pink, very fresh and beautiful.

**George Bruzzard.**—A beautifully shaped bloom; bronzy red in color with reverse side of petals old gold.

**Golden Eagle.**—Large in size, perfect in form and a superb golden yellow in color.

**Harvard.**—Produces a good medium sized bloom of the darkest shade of crimson.

**Kitty Lawrence.**—Lovely shades of cream and fawn. Large, very gracefully formed flowers, with irregular tubular petals of fine substance.

**Naomah.**—Incurved white. Petals broad and incurving. Flowers of excellent substance.

**Chieftain.**—A beautiful broad-petaled, incurving variety, round and ruffled; one of the prettiest forms.

**Ramapo.**—An excellent variety. The heavy golden yellow, richly colored.

**Mancato.**—An enormous exhibition variety with perfectly double flowers. Color, rosy purple.

**William Turner.**—Pure white in color. It is enormous in diameter, deep in build and very perfect in form.



"Incurved" Chrysanthemum

## Countess Collection New English Garden Chrysanthemums

To those persons who have planted the late flowering sorts and failed to get them into bloom before frost, these new imported sorts will appeal. All will flower readily in the garden during September and October, and while the flowers will not be as large as the late sorts their freedom of bloom will make up for anything that may be lacking in that respect.

Price, 15c each; full collection of 10 sorts, \$1.25 postpaid.

**Carrie.**—Bright golden yellow flowers in great profusion during September. Dwarf habit.

**Cranford Pink.**—Lovely silvery pink flowers of fine size, nicely incurved and very lasting. Fine for cut flowers.

**Countess of Caryl.**—A very free flowering sort of dwarf habit. Color, terra cotta and bronze. Rich and handsome.

**Glory of Seven Oaks.**—Deep golden yellow, very free flowering. Excellent dwarf habit.

**Groachers Crimson.**—Large handsome flowers of a rich shade of crimson. Blooms very early.

**Leslie.**—Light canary yellow. Covered with its pretty flowers early in the fall.

**Mignon.**—Rosy pink, shaded silvery. Strong, vigorous grower and very free.

**Nina Blick.**—Rich golden bronze shaded to yellow. Dwarf spreading habit and free flowering.

**Normandie.**—Delicate shell pink flowers of wax-like texture. Fine for cut flowers. One of the best of this type.

**Queen of Whites.**—Snowy white flowers cover the plant early in the fall. A gem in the garden.



Fuchsia Plant

## Beauty Collection Choice Fuchsias

Beautiful, graceful, free flowering, easily grown plants for window, porch or yard decoration.

Price, 15c each; set of 6 sorts, 60c postpaid.

**Annie Earle.**—Tube and sepals waxy white, corolla single, clear carmine; plant splendid and free blooming.

**Dr. Brooks.**—Rich, dark blue corolla, with crimson sepals. A beautiful single variety, never out of bloom.

**General Roberts.**—Flowers very large, corolla plum color, tube and sepals crimson; one of the finest double varieties.

**Little Beauty.**—A dwarf growing double variety, producing with great freedom small flowers of great beauty. Purple corolla with scarlet sepals. A little gem.

**Molesworth.**—Superb double white variety; tube and sepals bright scarlet; corolla large, double and waxy white.

**Sylvia.**—Calyx scarlet. Corolla giant in size and pure white in color. Beautifully formed single flowers.

## Rex Begonias

Grown for the beauty of the foliage. The leaves are large, variegated and margined with a peculiar silver metallic gloss. The most ornamental of window plants; also useful in vases and baskets.

25c each; 3 different kinds for 60c postpaid

**NEW CANNAS.**—You ought to try our new Cannas **FIREFLY** and **CITY OF PORTLAND**. See descriptions, page 89.



## General Price List of Annual Bedding Plants



During April, May and June we have thousands of flowering and ornamental annual plants. No order too large or too small. Write for 100 prices if interested.

**BY MAIL.**—If you add 5c each or 35c per dozen we will prepay charges on above plants excepting those from pots (3 inches or over), which cannot be mailed safely and must go by express, so to pay transportation charges. No plants sent C. O. D.

For descriptions see Flower Seed Department of this catalog

	Each.	Doz.		Each.	Doz.
<b>Agerantum—</b>			<b>Lobelia—</b>		
Blue or mixed, T .....	.06	.50	Compacta or Trailing, T (\$3.50		
<b>Alyssum—</b>			100) .....	.06	.50
Sweet, T .....	.05	.50	From 2-inch pots .....	.10	1.00
<b>Antirrhinum—</b>			<b>Marigolds—</b>		
Snapdragon .....	.10	1.00	African—Double orange yellow	.05	.50
<b>Aster—</b>			French—Double yellow marked		
Giant Crego, white, pink, pur-			with brown-red, Tall or		
ple or mixed, T.....		.50	Dwarf .....	.05	.50
<b>Candytuft—</b>			<b>Myosotis—</b> See page 82.		
Mixed or white, T .....	.05	.50	<b>Pansy—</b>		
<b>Carnation—</b>			Choice plants, blooming age,		
Named varieties (see page 77)			postpaid .....	.60 to	.75
<b>Chrysanthemum—</b>			12 in a basket, Steel's Masto-		
Named varieties (see pages 78			dons in full bloom, by express		
and 81)			only (charges collect) .....	.75 to 1.50	
<b>Cosmos—</b>			<b>Petunias—</b>		
Red, pink, white or mixed, T...	.07	.60	Single Ruffled Giants, or Dou-		
<b>Cobea Scandens—</b>			ble, mixed colors only.....	.07	.75
From 2-inch pots .....	.15	1.50	From 2-inch pots .....	.10	1.00
From 3-inch pots .....	.20	2.00	From 3-inch pots .....	.20	2.00
<b>Coleus—</b>			From 4-inch pots .....	.25	2.50
Choice colors, 2-inch pots.....	.10	1.00	<b>Phlox—</b>		
Choice colors, 3-inch pots.....	.15	1.50	Drummondii, annuals mixed, T.	.06	.60
<b>Dracena Palm (Fountain Plant),</b>			<b>Salvia (Scarlet Sage)—</b>		
(see catalog sizes, page 75).			Splendens, tall, T .....	.06	.60
<b>Geraniums—</b> (See collections, pg.			Zurich, a Fireball, new dwarf, T	.07	.75
76.)			2-inch pots .....	.10	1.00
Single or double varieties in			3-inch pots .....	.15	1.50
scarlet, red, salmon pink,			4-inch pots .....	.25	2.50
deep pink, light pink or white			<b>Stocks—</b>		
or Ivy Leaved trailing, pink			Fine Mixed Colors, T .....	.06	.60
or red.			<b>Verbena—</b>		
From 2-inch pots .....	.10	1.00	Fine Mixed T .....	.06	.60
From 3-inch pots .....	.15	1.50	From 2-inch pots .....	.10	1.00
From 4-inch pots .....	.20	2.00	<b>Vinca—</b>		
From 4-inch extra select			Variegated, from small pots...	.10	1.00
plants in full bloom .....	.25	2.50	Variegated, from large pots...	.20	2.00
<b>Pelegonium (Lady Washington)</b>			<b>Zinnias—</b>		
From 2-inch pots .....	.15	1.50	Giant Mixed .....	.10	.75
From 3-inch pots .....	.25	2.50	Common Mixed .....	.06	.60
From 4 and 5-inch pots, spec-					
imens in bloom .....	.50 to	.75			
<b>Trailing Ivy—</b> (For baskets and					
Boxes)					
2-inch pots .....	.10	1.00			
3-inch pots .....	.15	1.50			
<b>Heliotrope—</b>					
Blue, T .....	.10	.75			
Blue, 2-inch pots .....	.10	1.00			
Blue, 3-inch pots .....	.15	1.50			
Blue, 4-inch pots .....	.20	2.25			

Note.—"T" stands for transplanted plants growing in flats or boxes.

**REMEMBER.** we are not offering you little seedling plants, pulled from the seed beds. Our plants are strong, healthy, transplanted plants from flats or pots, raised from our **HIGHEST QUALITY SEED** or propagating plants of **SUPERIOR MERIT**.

**Plant Tubs or Japanese Kegs.**  
Filled with large flowering plants and vines; for porch or garden display.

Size 13-in. \$3.00 to \$5.00 with Dracaena center  
Size 13-in. 2.50 to 3.50 with Daisy center

**Hanging Baskets.**  
Filled with large flowering plants and vines.

Size 10-in. \$2.00 to \$2.25 (Cannot be  
Size 12-in. 2.50 to 3.00 shipped safely)



## HARDY PERENNIAL FLOWERING PLANTS

No class of plants enjoy greater popularity at the present time than the Hardy Perennials. They have made rapid strides into public favor the past few years, until now they may be considered to have a prominent and a permanent place in our American gardens. Once planted they require very little care, increasing in size of plant and profusion of bloom from year to year. Most varieties can be taken up, divided and reset every third year.

**LARGE STOCKS—LOW PRICES.**—We are in a position to supply unlimited quantities at special prices and you will find our plants are strong and well rooted. Our prices must not be compared to Eastern lists, for our plants are all hardy, field grown, worth double the average stock sold. Limited space will not permit us to list all varieties we can supply. Ask for any special varieties wanted.

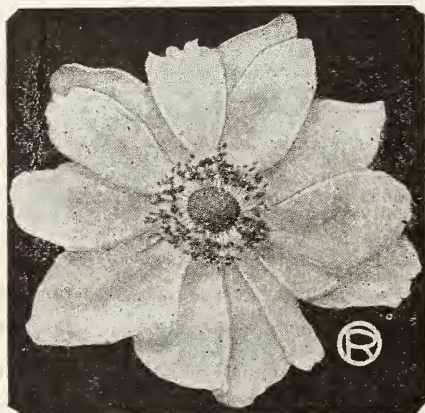
### Aconitum

**Wilsoni.**—New, bushy plants for shady places; 5 feet, large violet blue flowers in September; stately habit. **Each 35c**

### Achusa

**Italica.**—(Dropmore variety.) New. The bright blue Forget-Me-Not-like flowers are clustered on graceful stems during the entire season and way late into the fall; 3 feet. **Each 25c**

**Myosotidiflora.**—New; rich blue flower sprays in June; 1 foot. **Each 20c**



Anemone.

### Anemone

**JAPANESE.**—These beautiful Windflowers are one of the most important hardy plants. They begin blooming early in August and continue in full beauty until cut down by hard frost. Excellent for bouquets, lasting for days when cut. 2½ to 3 feet.

**Geante Blanche.**—Very large, pure white.

**Prince Henry.**—Rich red, semi-double.

**Whirlwind.**—Pure white, semi-double.

**Rosea Rubra.**—Beautiful rich pink.

**Each, 25c; Collection 4 Kinds, 80c**

### Alyssum

**Gold Dust (Saxatile Compactum).**—Large heads of golden yellow flowers in May and June; silvery foliage; fine for rockeries; 10 to 12 inches. **Each 20c; 3 for 50c**

### Arabis

**ROCK CRESS.**—One of the most desirable of the very early spring flowering plants for edging and the rock garden. Forms a dense carpet, completely covered with pure white flowers; 6 inches. **Each 20c**

### Asters—Hardy

**Michaelinas Daisies.**—We offer special varieties of these popular and showy, summer and fall, free blooming plants.

**Alpinus.**—For rockery or edging; 10 inches; bluish purple flowers in May. **Each 20c; 3 for 50c**

**Perry's Favorite.**—Light purple, 12 to 15 inches, blooming in July and August. **Each 20c**

**Abendrodthe.**—Rosy red, 2½ feet, blooming September and October. **Each 25c**

**Beauty of Colwall.**—Same as above but ageratum blue. **Each 25c**

**Top Sawyer.**—Clear parma violet color, 4 feet. **Each 25c**

### Aquilegias

**COLUMBINES.**—The Columbines are one of the most elegant and beautiful of hardy plants, producing their graceful spurred flowers on stems rising two feet or more above the beautifully divided foliage, and are highly prized for cutting; June to September.

**Mixed Colors, very choice.** **Each 20c**

### Bellis Perennis

**English Daisy.**—Popular early flowering plants.

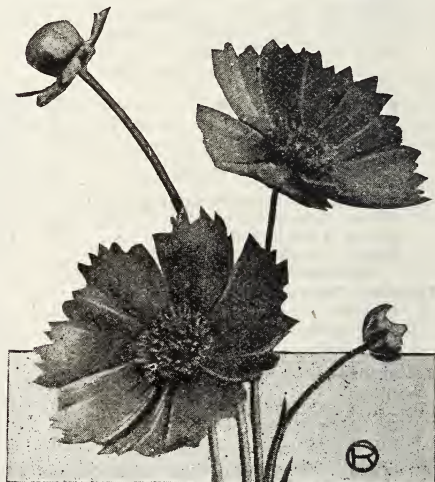
**Double Red or White.** **Each 15c; doz. \$1.50**

**Giganteum.**—Improved, double, large flowering; flowers extra fine; 2 inches across.

**Double White or Pink.** **Each 20c; doz. \$2.00**

### Coreopsis

**LANCEOLATA GRANDIFLORA.**—Popular hardy plants. The flowers are a rich golden yellow, of graceful form and invaluable for cutting; the main crop comes during the latter part of June, but it continues in bloom the entire summer and autumn; it succeeds everywhere; 1½ feet. (See cut.) **Each 20c**



Coreopsis

**PRICES.**—Ten times the each price will be the dozen price. All prices postpaid; but if you want to pay express charges we can give you much heavier, larger clumps with more dirt on the roots, which of course is better for the plants. Instruct us, please.



**PRICES**—All prices postpaid—10 times the each price is dozen price. **BY REQUEST** we will send larger plants if you will pay express or freight charges



Canterbury Bells—Calycanthemum

## Canterbury Bells

**CAMPANULAS**—or Bellflowers.—One of the most popular hardy garden plants on account of the beautiful clusters of long-stemmed, dainty yet large flowers. They are very showy. The "Calycanthemum" are only "biennials."

**Persicifolia (Peach Bells).**—Large clusters of drooping bell shaped flowers during June and July; 3 feet. **Each 20c**  
Blue or White.

**P. Gigantea Moerheimi.**—A grand sort with long stems of pure white double camellia-like flowers, 2 to 2½ inches in diameter; in bloom from the middle of May until late in July; 2 to 3 feet. **Each 25c**

**Calycanthemum (Cup and Saucer Canterbury Bells).**—A beautiful form of this favorite flower. (See cut.)

Blue, Rose or White. **Each 25c**

## Chrysanthemums

They produce a lavish profusion of blooms after most flowers are gone; very popular.

**Hardy Garden.**—Small flowers.

Yellow, Bronze-red or White. **Each 20c; 3 colors 50c**

For named varieties see page 78.

**DAISY.**—See "Bellis," page 84 for English, also page 80 for Shasta Daisy.

## Doronicum

**Caucasianum.**—One of the most effective and very early spring flowering perennials, growing about 2 feet high, producing a profusion of Marguerite-like golden yellow flowers of much beauty and elegance. It is a splendid flower for cutting. **Each 20c**

## Dianthus

Garden Pinks

**Plumaris.**—Bearing sweet clove-scented flowers in the greatest profusion during May and June. Indispensable for the hardy border and for cutting; 1 foot.

Finest Mixed or Double White. **Each 20c**

## Delphinium

**HARDY LARKSPUR.**—These are deservedly one of the most popular subjects in the hardy border, bold, attractive and highly prepossessing plants of easiest culture; perfectly hardy; 3 to 4 feet. Fine for cut flowers, June to November; cut the blooms to make more later. (See cut.)

Hybrids, all shades. **Each 20c**

### CHOICE NAMED VARIETIES

Full Collection the following 6 kinds \$1.50

**Belladonna.**—A free and continuous bloomer; flowers clear turquoise blue; very beautiful; long flower spikes. **Each 25c**

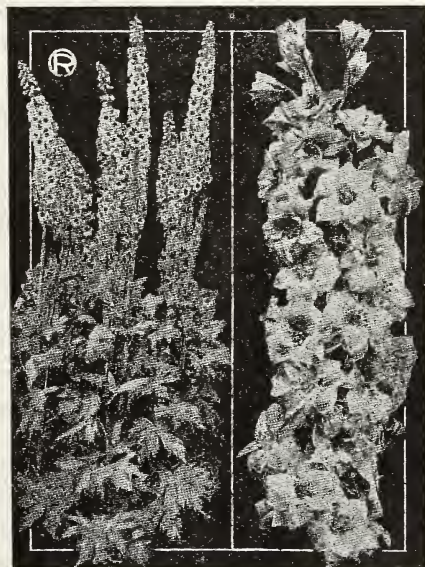
**Carmen.**—Flowers very large and semi-double; of a deep blue; center rosy plum. **Each 25c**

**Duke of Connaught.**—Very attractive, rich oxford blue, with a bold white eye. **Each 25c**

**Formosum.**—Dark blue, white center; an old favorite; 3 to 4 feet high. **Each 25c**

**King of Delphiniums.**—New and distinct; giant, semi-double flowers on strong stems; deep blue, white eye; 5 ft. **Each 50c**

**Moerheimi.**—A new and continuous bloomer; pure white; 5 feet tall. **Each 50c**



Delphinium (Plant and Flower Spike.)

## Digitalis

**FOXGLOVE.**—Old-fashioned, hardy, desirable plants with broad foliage and showy flowers borne on spikes. June and July; 3 to 4 feet. **Mixed colors. Each 20c**

**Montrosa (Giant Foxglove).**—Handsome, variously colored flowers in spikes surmounted with one large, saucer-shaped terminal flower. **Mixed. Each 25c**

**FOR BEST RESULTS,** plant these hardy perennials in the fall or early in the spring before new growth gets too far advanced.



## Hardy Perennial Flowering Plants—Continued

NOTE.—20c plants are \$2.00 doz.; 25c, \$2.50 doz. See note top page 81.



**Dicentra—Bleeding Heart**

### Dicentra

**BLEEDING HEART.**—An old-fashioned favorite; its long racemes of graceful heart-shaped pink flowers are always attractive. Perfectly at home in any part of the hardy border, and especially valuable for planting in the shade.

Each 35c; extra large 50c

### Gaillardia

**Grandiflora**—(Blanket Flower).—Among the showiest and most effective of perennial plants, blooming continually from early summer on through the season. Grows 2 feet high. Flowers about 3 inches across, dark red in center with rings of crimson and vermillion encircling same on a golden yellow ground.

Each 20c; 3 for 50c

### Geum

**Mrs. Bradshaw.**—A showy border plant, growing about 18 inches high and producing all summer and fall brilliant double scarlet flowers in large clusters. This new variety is a fine advance from the older sorts heretofore grown. We consider this the finest red hardy plant.

Each 20c; 3 for 50c

### Gypsophila

**Baby's Breath.**—Fine, delicate foliage. Minute white flowers borne in enormous quantity in open panicles during summer months. Be sure and have a few plants of this for cutting, as it works up beautifully in bouquets of other flowers; 3 to 4 feet. **Paniculata.**

Each 25c

### Hemerocallis

**Flava**—(Lemon Lily).—Three feet; May and June. Flowers clear, full, yellow; very fragrant; fine for cutting.

Each 20c

### Heuchera

**Sanguinea.**—A most desirable dwarf bushy plant of robust constitution and easy culture. Bears during July and August, long graceful sprays of brilliant coral red flowers in great profusion. Excellent for rockery or border and of great value for cutting; 2 feet.

Each 25c

### Helianthus

**Newmani.**—Grand sort entirely distinct, growing only 1½ feet high and bearing single anemone shaped flowers of a brilliant yellow color with a black center. A mammoth hardy "Black-eyed Susan." Flowers very lasting when cut. A profuse bloomer; August, September.

Each 20c

### Hollyhocks

Stately, majestic, hardy plants, necessary to every old-fashioned garden. Their large, brilliant flowers are very showy. Rich soil, plenty of water and a spraying of "Bordeaux" should they show rust or mildew, will grow them to perfection; 6 to 8 feet.

**Double White, Yellow, Red or Pink.**

Each 20c; 4 colors 75c

### Hypericum

**St. John's Wort.**

**Moserianum (Gold Flower).**—Of drooping, training nature. Fine for rockeries, etc. Free flowering. Rich golden-yellow; June to frost.

Each 25c; large plants 50c

### Iberis

**Hardy Candytuft.**

Most desirable dwarf plants with evergreen foliage, which is completely hidden with dense heads of small flowers early in the spring; 8 to 10 inches.

**Sempervirens.**—Pure white.

Each 15c

**Glandulose.**—Lavender blue.

Each 20c

### Incarvillea

**Hardy Gloxinia**

**Delavayi.**—One of the choicest perennial plants. It produces large Gloxinia-like rose colored flowers during May, which last in perfection a long time; these are produced in clusters on stems 18 inches high; succeeds anywhere.

Each 25c

### Lavender

**VERA.**—The true, sweet, fragrant lavender. Small plants 20c; large plants 25c to 35c each.

### Lobelia

**Cardinalis.**—Rich fiery cardinal flowers in long spikes; very showy; July to frost; 2 feet.

Each 25c

### Myosotis

**Forget-Me-Not.**

**Palustris.**—A variety that is hardly ever out of flower; useful in a shady spot in the border.

Each 20c; 3 for 50c

**PINKS—HARDY GARDEN.**—See Dianthus, page 81.

### Poppy

**Nudicaule (Iceland Poppy).**—The plant forms tufts of fern-like foliage, from among which the slender flower-stalks rise to about a foot in height and bear fragrant, cup-shaped flowers of white, yellow and orange-scarlet. The profusion of bloom is astonishing. June to October. **Mixed colors only.**

Each 20c

**Oriental.**—Very large flowers; bright red with a black blotch at the base of each petal. June to July; 3 feet.

Each 20c

**Oriental, Salmon Queen.**—Beautiful salmon pink.

Each 35c

**Oriental, Perry's White.**—New and rare. Pure satiny white with a crimson, maroon blotch at the base of each petal.

Each 50c

**PRICES**—Note, the above prices are prepaid. **BY REQUEST** we will send larger plants with more dirt if you will pay express charges.



## Phlox

Among the hardy perennial plants no class is of more importance than the Phloxes, succeeding in almost any soil and position, and flowering through a long season. Excellent for cutting and decorating or for mass effects. Keep well in water.

**Good assortment. Each 20c; doz. \$1.75.**

**Our selection, 6 choice named kinds, all best types; very choice. Price \$1.00**

### LIBERTY COLLECTION

New, rare and rich; flowers of largest and best types; very choice.

**Your choice. Each 25c; 1 plant of each variety (8), \$1.75 postpaid.**

**Asia.**—One of the most valuable recent introductions, a delicate shade of mauve, with a crimson carmine eye. Very free blooming.

**Europa.**—A white variety with very decided crimson carmine eye; the individual flowers as well as the trusses are very large, entirely distinct.

**Elizabeth Campbell.**—Very bright salmon pink with lighter shadings and dark crimson eye; an entirely new and much wanted shade in Phlox.

**Frau Anton Buchner.**—The finest white variety yet introduced, having the largest truss and individual flower; of dwarf habit.

**General Von Heutsze.**—Immense trusses of very large flowers; color, the most brilliant salmon red imaginable. Simply grand.

**Le Mahdi.**—Immense panicles of deep velvety purple flowers. Very rich and striking.

**Rynstrom.**—An improved form of the popular variety Pantheon; fine for massing, of a Paul Neyron Rose color.

**Sir Edward Landseer.**—Rich bright crimson flowers in large panicles; 3 feet high. A rare and beautiful variety.

## Primulas—Primrose

The hardy primroses are among the most beautiful and interesting of our early spring flowers. (See cut.)

**Dean's Hybrids.**—Pretty, low growing plants, bearing large numbers of beautiful flowers very early in the spring and having the old-fashioned cowslip fragrance so dear to the heart of every Englishman. The flowers are of the richest shades and of a very wide range of color, from pure yellow to the deepest crimson maroon.

**Each 20c; 4 for 60c**

**Giant Yellow.**—A grandly improved form of the genuine old English Primrose or Polyanthus, bearing during early spring large umbels of yellow flowers.

**Each 20c; 3 for 50c**

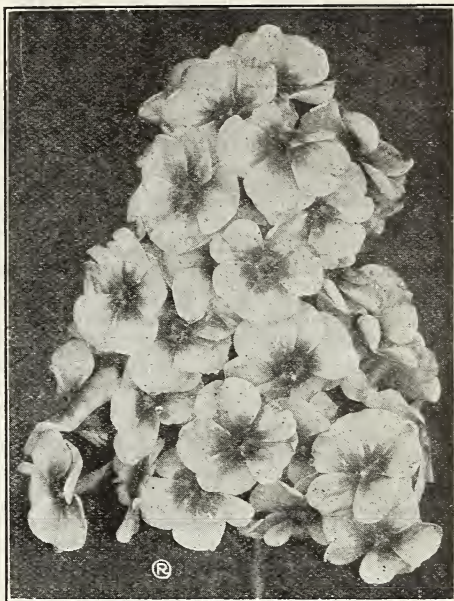
## Pyrethrum

### PERSIAN DAISY

One of the most valuable of our early summer flowers. Charming shades of color, and wonderful lasting properties as a cut flower. They flower in May and June and frequently in August and September the second time; the colors run into almost every shade, which makes them foremost of plants in this particular season.

**Hybridum.**—Mixed colors.

**Each 20c**



**Phlox Decussata.**

## Pampas Grass

**Gynerium Argenteum.**—A noble ornamental grass, easily grown, producing long, narrow pointed leaves and majestic, silvery white plumes, which are very valuable for winter decoration. Grows 6 to 8 feet high. Young plants 25c; strong roots 35c to \$1.00; large specimen plants, \$1.50 to \$2.50 up.

## Rudbeckia

Indispensable plants for the hardy border; grow and thrive anywhere, giving a wealth of bloom, which are well suited for cutting.

**Lanceineatus (Golden Glow).**—Flowers beautiful golden-yellow; very double. Marvelous continuity of bloom from June till late fall; 6 to 8 feet.

**Small plants, 20c; large, 35c**



**Primulas**

**FEED YOUR PLANTS.**—You must supply "food," in other words fertilizer, if you want the best results. Read about "Wonder" and "C-M," pages 38-39.



Lamont, Wash., Box 205, Jan. 23, 1918.

Routledge Seed & Floral Co.,

Gentlemen: Plants received from you through Mr. J. C. Ratcliff, 1223 East Madison street, last year are the best I have ever had.

Yours very truly,

ROBT. A. VENSORE.

## Scabiosa

**Caucasica.**—Handsome, artistic, single flowers about 3 inches across, which are borne continuously throughout the summer; fine for cutting. **White or Lavender, Each 25c**

## Saxifragas

**Umbrosa (London Pride).**—A low-growing, spreading sort, throwing up stems a foot high of pretty pink flowers in dainty clusters. Small, dark evergreen leaves, a fine border plant or for rockeries. **Each 20c**

**Megasea.**—Leaves large, round and flat, deep green; flowers in clusters very early; 1 foot. **Each 25c**

## Shasta Daisy

Very large daisy-like flowers, often measuring 4 to 5 inches across, having three or more rows of petals of the purest white. Flowers produced in great profusion on long strong stems. Very popular; 2 to 3 feet. **Each 20c**

## Tritoma

**Pfitzerii (The Everblooming Flame Flower).**—bloom from August to October, with spikes 3 to 4 feet high, and heads of bloom of a rich orange-scarlet, producing a grand effect either planted singly in the border or in masses. (See cut.) **Each 25c**

## Veronica

### Speedwell

**Rupestris.**—A fine rock plant, growing 3 or 4 inches high, thickly matted deep green foliage, hidden in spring under a cloud of bright blue flowers. **Each 25c**



Shasta Daisy

## Vinca

**Minor (Myrtle).**—An excellent dwarf evergreen trailing plant used extensively for carpeting ground under trees and on graves. Small dark green leaves. **Each 25c; doz. \$2.50**

**Aurea—Variegated.**—See page 79.



Tritoma

Klickitat, Wash., June 18, 1918.

Routledge Seed & Floral Co.,

Dear Sirs: The plants received in splendid condition and I am pleasantly surprised with them.

MRS. MARK E. HOGG.

## Violets—Sweet

Price, 20c each; 6 sorts 75c.

Of all the delightful perfumes, that of the Sweet Violet is the most delicate and pleasing, and places this modest flower among our greatest favorites. They commence to bloom as soon as the cold weather comes in the fall and flower even more profusely in the spring.

**Alaska.**—Hardy and robust and producing in spring great masses of enormous double flowers of a deep blue black color and powerful fragrance.

**Lady Hume Campbell.**—Large double flowers of a beautiful light blue color. Very free blooming.

**California.**—Very showy and beautiful flowers; enormous size, deep violet blue, and extremely fragrant.

**Princess of Wales.**—Flowers single, of gigantic size; color, a very rich shade of blue.

**Peacock.**—This is a charming variety and pleases everyone. It has lovely flowers of white, shaded with light blue.

**Swanley White.**—The finest and best double white violet in cultivation.

## Wall Flower

**Double English.**—A fine old hardy garden plant seen in every English garden. Grows about 18 inches high and produces early in the spring, rich colored spikes of bloom in various shades of yellow and brown. **Each 20c**

Yucca—See Page 105





Japan Iris.

## Liberty Iris—Fleur-de-Lis

These are among the most desirable and easiest grown of our spring flowering hardy plants, producing in May and June their showy flowers of exquisite coloring, combining the richest and most delicate tints. **Roots from October to April.**

**Choice Mixed, 6 for 85c; doz. \$1.50 postpaid CHOICE NAMED VARIETIES.**

**Each 25c; all 6 kinds \$1.25 postpaid; 4-year-old clumps, not prepaid, each 75c.**

**Florentina Alba.**—An excellent variety for cutting and an early bloomer. Flowers ivory white, tinged with lilac.

**Coloriso.**—Uniform Orchid Color; very attractive.

**Cataerina.**—Large flowers, clear blue, falls soft lilac.

**Albert Victor.**—Soft blue, falls lavender, large and beautiful.

**Junita.**—Clear blue, fragrant, tall.

**Mad. Chereau.**—Pure white, edged with azure blue; falls deep white with blue penciling.

## Superb New Varieties

**Each 50c; all 6 only \$2.00 postpaid; 4-year-old clumps, \$1.00 each by express.**

A splendid collection of the latest introductions, embracing not only new colors but improved forms.

**Queen of May.**—A rare and lovely new variety, soft rose lilac, almost pink.

**King of Iris.**—A striking novelty with flowers of perfect form, the standards clear lemon color, falls deep satiny brown with a broad border of golden yellow.

**Lohengrin.**—Foliage and flowers of gigantic size, the flowers nearly 5 inches deep with petals 2 inches wide, are of a deep mauve pink.

**Nibelungen.**—Standards fawn yellow, falls violet blue with fawn margin; distinct and pretty.

## Japan Iris—Kaempferi

**Roots from October to June.**

The Japanese Iris is quite distinct from all others, and never fails to excite the admiration of all who see it. It is becoming more popular each year. The enormous flowers produced in June and July display a marvelous blending of rich and rare shades. They like a rich soil and plenty of water when in bud and flower. We offer a select collection of named varieties, as well as a very fine mixture.

**Mixed, good assortment. Each 20c; doz. \$2.00**

## Royal Collection

**Each 25c; all 6 kinds, \$1.25 postpaid.**

**Kuro-Kuma.**—Bright purple with crimson sheen.

**Ko-kirin.**—Rose, tinted white, veined violet purple.

**Kosue-no-iro.**—Violet blue, veined with white.

**Sano-Watashi.**—White with canary-yellow center.

**Shuchiukwa.**—Crimson purple with large white veins and center.

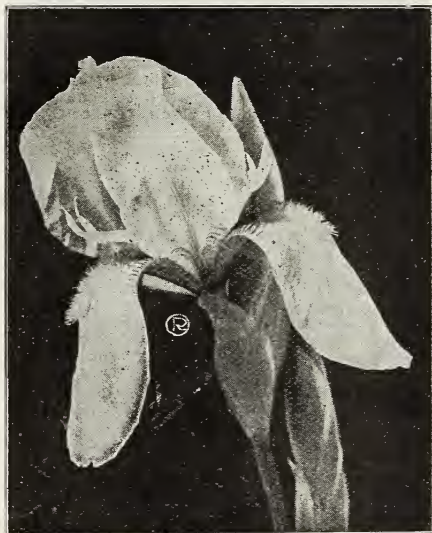
**Tokyo.**—The finest pure white, 6 petals.

Wenatchee, Wash., May 20, 1918.

Routledge Seed & Floral Co.,

Gentlemen: The bulbs and plants came in fine condition. Thanks.

MRS. J. RIGGLE.



Fleur de Lis

**Princess Victoria Louise.** Standards pure sulphur yellow; falls rich plum color, with cream-colored edges. A new and distinct combination of colors.

**Rhein Nixe.** Standards pure white, falls deep violet-blue, with white margin; will attain a height of 3 feet, with many-branched stems.

**NOTE**—The 4-year-old clumps we offer will give a profusion of blooms quickly. Sent by express collect, or we will mail them for 10c extra.



## CHOICE HERBACEOUS PAEONIES

Fine, hardy plants, rivaling the Rose in perfection of bloom, color and fragrance. They are at home in any climate or soil, but thrive best in deep, rich, well drained loam. They make a gorgeous display. The Paeony is perfectly hardy and generally able to care for itself, but it does not follow that they enjoy neglect. Give them ample room in which to grow, keeping them free from weeds and grass, and they will amply repay all the care given.

Plant in the fall or early spring and do not cover the crown of the roots over 2 or 3 inches.

Every variety in the following collection is a beauty. **PRICES**—Divided roots "D," post-paid; Clumps "C" (4-year-old, will bloom freely first year), shipped by express, charges collect—or we will box and mail for 20c extra per clump.



Paeony—Festiva Maxima

**ALBA SUPERBA.**—Flowers large, handsome and of creamy white, shaded to rose in the center; very desirable. **Each, D 40c; C \$1.25**

**BENARD PALISY.**—The large beautiful blooms are a rare shade of salmon and white. New; of real merit. **Each, D 60c; C \$1.75**

**BOULE DE NIEGE.**—Large cup-shaped bloom of great substance and full perfect form. Color milk white with distinct sulphur yellow center. Some petals flecked with crimson. Fine tall erect grower, every shoot bearing several flowers. Blooms right after Festiva Maxima. **Each, D 60c; C \$1.75**

**CHARLEMAGNE.**—Lilac white with a slight blush center; fragrant, medium height, free bloomer. Globular rose type flower. Extra. **Each, D 50c; C \$1.50**

**DUCHESSE DE NEMOURS (Calot).**—Sulphur white with greenish reflex; flower large, cup shaped; splendid cut flower variety; mid-season; fragrant. **Each, D 50c; C \$1.50**

**FAUST.**—Guard petals and crown pink, fading to lilac white; collar of narrow sulphur white petals. **Each, D 40c; C \$1.25**

**FESTIVA MAXIMA.**—Enormous, full, double blooms; petals very broad; color pure white with an occasional carmine spot on the edge of the center petals; very vigorous grower; one of the best white Paeonies, early, fragrant. **Each, D 50c; C \$1.50**

**GENERAL DODDS.**—Beautiful and graceful, free bloomer; flowers large and a lovely shade of blush pink. **Each, D 50c; C \$1.50**

**GLORIA MUNDI.**—A fine cutting variety; free bloomer, large handsome flowers of pure white with a salmon center. **Each, D 40c; C \$1.35**

**LADY DARTMOUTH.**—Flowers large, yet graceful and freely produced; color pure white. **Each, D 40c; C \$1.25**

**LA TULIPE.**—Very large shell formed bloom, delicate rose, fading to a creamy white; center petals tipped with carmine; outside of guard petals striped with carmine. **Each, D 60c; C \$1.75**

**LIVINGSTONE.**—Very massive, solid, light pink of the highest class. Rose shape; free, vigorous bloomer. **Each, D 60c; C \$1.75**

**LOUIS VAN HOUTTE.**—One of the most conspicuous of the dark-colored varieties. Blooms are freely produced on strong upright stems well above the foliage; color rich dark crimson. Very desirable. **Each, D 50c**

**MADAME DE VERNEVILLE.**—Guard petals sulphur white, center delicate flesh; flowers very double and compact, imbricated; borne on long stems. This is one of the most desirable for all purposes. **Each, D 60c; C \$1.75**

**MAGNIFICA.**—Grand large flowers, a free bloomer, very desirable; a charming shade of deep pink. **Each, D 50c; C \$1.50**

**MEISSONIER.**—Broad outer petals, brilliant purple amaranth, inner petals crimson; free bloomer. **Each, D 60c; C \$1.50**

**OFFICINALLIS RUBRA.**—Medium sized, deep crimson flowers, in great profusion. One of the oldest and best varieties; the earliest sort to come into bloom. This is the "piney" of your grandmother's garden and its color cannot be surpassed by any of its newer rivals. Always in bloom for Decoration Day and very popular cut flower on that day. **Each, D 35c**

**ORNAMENTS DES MASSIFS (Crousse).**—Large and stately, massive flowers on strong stems. Lovely cream white, shaded chamois. **Each, D 60c; C \$1.50**

**PRINCESS MATHILDE.**—A handsome showy sort, flowers large and massive, rich claret red. **Each, D 50c; C \$1.50**

**VAN DYCK.**—Grand large flowers of a soft pink center, shaded chamois and salmon. Extra choice. **Each, D 60c; C \$1.50**

Vance, Wash., May 13, 1918.  
Routledge Seed & Floral Co.,  
Gentlemen: Received my plants. They were in fine condition. Am sending an order for more.

Very respectfully,  
MRS. G. C. ORR.

Make your Paeonies grow and bloom profusely by applying a liberal amount of "C-M" and "Wonder." See pages 38-39.



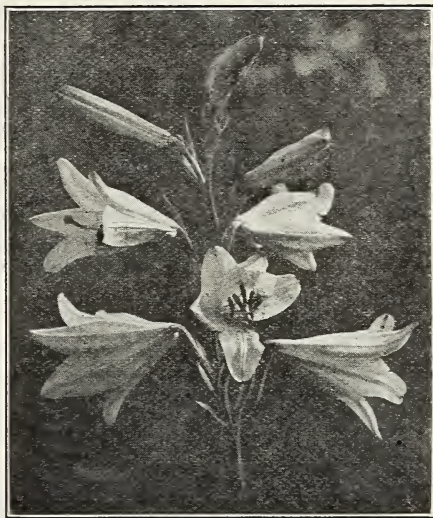
## BEAUTIFUL HARDY LILIES

No doubt many of our customers will be disappointed in not being able to buy the Japan Lilies this spring, but on account of war conditions we were not allowed to import them. However, we have obtained other very desirable and beautiful Lilies described below. Try them; we believe you will be pleased. They are all hardy and will increase in size and beauty each year.

### Lilium Candidum

**ST. JOSEPH or MADONNA LILY.**—This is the ever popular, fragrant, snow white, hardy garden Lily. The large, trumpet shaped flowers are produced in clusters at the top of 4 to 5-foot stems; blooms in the open ground in June. A very hardy and popular Lily. Planted in beds or among shrubbery it makes a stately, majestic display. (See cut.)

Each 25c; 3 for 65c; doz. \$2.25



Candidum Lily

### Lilium Washingtonianum

**MT. HOOD LILY.**—A beautiful Lily, native of Oregon; flower of open trumpet form; white, tinted with lavender pink; grows 3 to 5 feet high; the beautiful fragrant flowers are freely produced in graceful clusters. Few Lilies surpass it and it deserves to be planted much more extensively. Our bulbs are gathered in the foothills of Mt. Hood and grown one year in nursery rows. This makes them firmer, freer in bloom and sure to live.

Each 20c; 3 for 50c; extra large bulbs 25c, 5 for \$1.00 postpaid.

## New and Rare American Grown Lilies

Special—1 bulb each full collection \$1.60 postpaid.

**Batemani.**—Rich apricot, very handsome and free flowering. Each 25c; 3 for 60c

**Davuricum.**—A beautiful Lily from Siberia. Hardy and easily grown; 3 to 5 scarlet flowers on stems 2 to 3 feet tall.

Each 25c; 3 for 60c

**Elegans Leonard Joerg.**—Rich apricot, orange and red; large and showy.

Each 20c; 3 for 50c

**Speciosum Henryi.**—A splendid new rare Lily from China. It is so healthy and sturdy, so hardy and beautiful, so easy to grow, that it should be in every garden. It grows, when established, 3 to 5 feet high, each stem producing 5 to 8 large rich apricot yellow flowers. (See cut.)

Each 50c; 3 for \$1.35

**Superbum.**—Grows 3 to 5 feet high, producing from 5 to 40 nodding brilliant orange red blooms in July.

Each 25c

**Tigrinum Splendens** (Improved Single Tiger Lily).—Large flowers of excellent form; color orange salmon with dark spots; hardy and free bloomer.

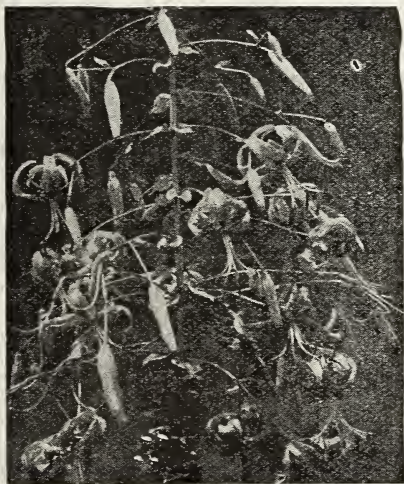
Each 25c; 3 for 60c

**Tenuifolium.**—The lovely Coral Lily of Siberia. A great beauty. The brightest of all Lilies. Grows 20 inches high with finely cut foliage, slender stems and beautifully shaded flowers of a very brilliant coral red; blooms very early with 12 to 20 flowers per stem.

Each 20c; 3 for 50c

**Lilium Pardalinum**—(Leopard Lily).—Very free flowering, hardy and easily grown. The beautiful flowers are orange scarlet with maroon spots.

Each 20c; 3 for 50c



Lilium Henryi

Plant Lily bulbs five times the depth of the bulbs in well-drained rich soil, and where they can remain for several years.



## Routledge's Superb Gladioli Bulbs

Plant 4 to 6 inches deep and as close as 6 inches in beds or borders or among the roses or shrubs. Planted at intervals from very early spring until July 1, they will give a profusion of flowers until the first frosts. All prices postpaid.

### New Novelty Collection

Eight magnificent new varieties, one each full collection (eight kinds, value \$2.95), \$2.50; 3 of each, \$6.25 postpaid.

**Charlemagne.**—French novelty of real merit; sunrise red with darker shadings.

Each 30c; 3 for 75c

**Blue Jay.**—True stock, porcelain blue, Iris-like effect; very large. Each 35c; 3 for \$1.00

**Etendard.**—Blush with clear crimson spot outlined with yellow; magnificent.

Each 50c; 3 for \$1.25

**Evelyn Kirkland.**—New, lovely true coral pink.

Each 30c; 3 for 75c

**Florence.**—Another French novelty; clear lilac with a white throat.

Each 40c; 3 for \$1.00

**Mephistopheles.**—Startling combination of red, yellow and black. Each 30c; 3 for 75c

**War.**—Glowing dark crimson, rich, rare and showy. Each 25c; 3 for 60c; doz. \$2.25

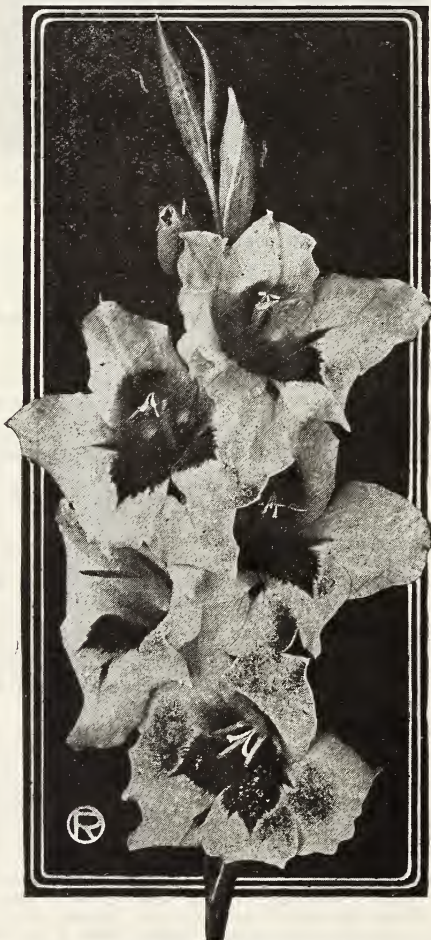
**Peace.**—Massive, strong growing, stately white, with lilac feathering in throat.

Each 20c; 3 for 50c; doz. \$1.75

### NEW, UP-TO-DATE AND POPULAR VARIETIES All Varieties Postpaid at Following Prices

**America.**—Conceded to be one of the finest varieties for cutting or bedding ever sent out; color a beautiful soft flesh pink.

3 for 20c; doz. 60c; 100 \$3.75



**Baron Josef Hulot.**—Deep, velvety purple; yellow lines in throat. Each 10c; doz. \$1.00

**Europe.**—The finest pure white yet introduced. Beautiful as an Easter Lily.

Each 20c; doz. \$2.00

**Faust.**—Rich wine color, immense flowers.

Each 10c; doz. \$1.00

**Glory.**—Cream-colored ruffled petals, with apricot throat; robust grower.

2 for 25c; doz. \$1.25

**Glory of Holland.**—White with red penciled throat; lovely flowers.

Each 10c; doz. \$1.00

**Golden King.**—Massive yellow, with maroon throat; most striking. Each 20c; doz. \$2.00

**Halley.**—Clear coral, enhanced by pale yellow throat marking; one of the most beautiful, regardless of price.

Each 10c; 3 for 25c; doz. 85c

**Independence.**—Late blooming, clear salmon pink; vigorous and effective.

3 for 25c; doz. 85c

**Jane Dieulafoy.**—Superb; cream with chestnut spotted throat; tall and graceful spike.

2 for 25c; doz. \$1.25

**Lily Lehman.**—Delicate cream, tinged pink; Lily shaped flowers, unusually pleasing.

Each 15c; 4 for 50c; doz. \$1.35

**Mrs. Francis King.**—Very showy, large, great merit; bright scarlet.

3 for 20c; doz. 60c; 100 \$3.75

**Mrs. Frank Pendleton, Jr.**—Tender pink with crimson velvet blotches on lower petals, like a huge Lady Washington Geranium; nothing finer.

Each 20c; 3 for 50c; doz. \$2.00

**Niagara.**—Creamy yellow, sometimes suffused pink; stately growth.

2 for 25c; doz. \$1.25

**Panama.**—Soft deep pink, showing in the sun a silver-frosted effect; beautiful at night.

Each 15c; 3 for 40c; doz. \$1.50

**Pink Perfection.**—Apple blossom pink; one spike in full bloom is a whole bouquet; half a dozen are a decoration.

Each 15c; 3 for 50c; doz. \$1.50

**Principine.**—Crimson with white throat; nothing will brighten your garden more effectively.

Each 15c; 3 for 40c; doz. \$1.50

**Schwaben.**—Magnificent, clear creamy yellow, immense flowers with petals like wax; most charming. Do not fail to plant this one.

Each 20c; 3 for 50c; doz. \$1.85

**Willy Wigman.**—Blush with crimson throat; a splendid table decoration, arranged flat.

3 for 35c; doz. \$1.25

Mrs. Frank Pendleton, Jr.

**REMEMBER** there is a big difference in Gladioli bulbs. Buy our strong, vigorous, free flowering, first size bulbs and get **REAL VALUE**.



## Gladioli Bulbs—Continued

**CHOICE MIXED GLADIOLI.**—Our choice mixture is composed of all large and up-to-date varieties and our customers can depend upon having a large and magnificent variety of colors.

Doz. 75c; 100 \$6.00

**POPULAR MIXTURE.**—This mixture will produce a large variety of flowers at a little expense; unequaled for the price.

First size bulbs. Doz. 60c; 100 \$4.25

Second size bulbs, but of blooming age. Doz. 40c; 100 \$3.00

Fairfax, Wash., March 5, 1918.

Routledge Seed & Floral Co.,

Dear Sirs: I received the flowers that I sent for and all are doing well. I could not have picked a better assortment had I been in your store myself. I also received your catalogue, which was welcome I am sure.

Thanking you very kindly for past favors and wishing you every success in the future, I remain,

MRS. MAE LEMARR.

Astoria, Oregon, March 8, 1918.

Routledge Seed & Floral Co.,

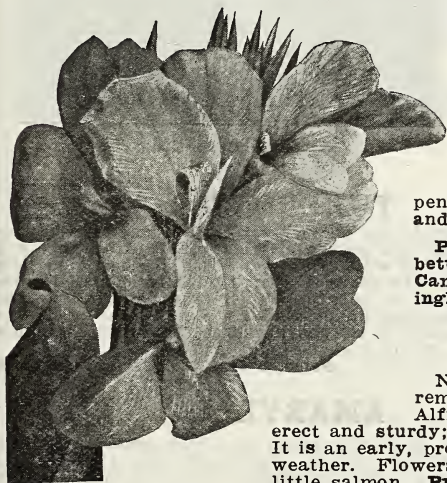
Dear Sirs: I received the package of Iris to-night at the P. O. It is a pleasure to open such a package. I felt very happy getting those nice bulbs. I sincerely thank you for them. I did not expect to get them and it was a pleasant surprise, and such fine ones.

Kindly thanking you,

Respectfully yours,

MRS. F. C. ROWAN.

## Cannas—Beautiful and Showy



Canna Flower

Everyone knows the value and beauty of Cannas for bedding. Their large, massive, tropical looking leaves and magnificent flowers can not be equalled in any other plant, of such easy culture. Plant in May or June, 18 inches apart in the richest bed you can give them (18 plants required for a 7-foot circular bed).

While there are many varieties of Cannas, we offer only 6 kinds, but they can be depended upon to be the most showy and desirable and especially adapted to Western conditions.

**PLANTS IN SEASON.**—Plants give quicker and better results than dormant roots. We hold all Canna orders until planting season. Water sparingly until well started.

### CITY OF PORTLAND

#### The Best Pink Canna to Date.

Named in honor of the City of Portland. This remarkable new canna is a cross between Mrs. Alfred Conard and Venus. The plants are stately, erect and sturdy; attractive green foliage of the best substance. It is an early, profuse bloomer, doing equally well in hot or cool weather. Flowers, a beautiful glowing "testout" pink, showing a little salmon. **Fronounced by experts to be the finest all-round pink to date.** This superb new canna is especially recommended for our cool Oregon climate (3½ to 4 feet). Not as strong a grower as some varieties and can be set 15 inches apart.

**GREEN CHARLOTTE**—A very showy and effective variety, foliage green, produces handsome clusters and beautiful scarlet flowers, each petal showing a border of rich yellow (4 feet).

**AUSTRIA**—One of the best of the giant flowered orchid type. Foliage beautiful green, strong and healthy. Flowers are of a pure golden yellow showing a few red dots on the inside petals (4 feet).

### PRICES—YOUR CHOICE, EXCEPT FIREBIRD.

**STRONG PLANTS**, 25c each, \$2.50 doz. postpaid; **LARGE PLANTS FROM POTS**, by express only, 30c each, \$3.00 doz.

Give your Canna bed a liberal application of cow manure. "C-M" is the best; pg. 39.

### FIREBIRD—A gorgeous red flowered green leaved Canna.

This is by all means the very best red-flowered, green-leaved Canna today. The flowers are borne in immense trusses, on strong stalks well above the leaves. They are of splendid form, round and shapely. The petals measure and sometimes exceed 2½ inches across, and the color is a clear glistening scarlet, without any streaks, spots or blotches. (4 feet.)

Plants 35c each; 3 for \$1.00; \$3.50 doz. Large plants from pots, 40c each; \$4.00 doz.



## CALLA LILIES

The Calla is one of the best winter flowering plants for room culture, needing little care beyond abundant water and an occasional washing of the leaves to keep them free from dust. Plant 1 bulb in a 6-inch pot. As soon as it starts growing bring to the light and heat and the result will be most satisfactory.

**WHITE CALLA.**—The most extensively grown; bulbs in season from September to May. Choice bulbs, 25c; large 30c; extra large 35c.

**NEW GODFREY.**—Plant is more dwarf in growth; flowers Lily white, very graceful and produced in astonishing numbers; come into flower quicker; will also do well in the garden for summer flowers.

Each 30c; 4 for \$1.00 postpaid

**YELLOW ELLIOTIANA.**—This new Yellow Calla is of marvelous beauty; flowers are large, rich, dark golden yellow, often 4 to 5 inches across the mouth; leaves are beautifully spotted with white. Bulbs in stock from November to June. (See cut.)

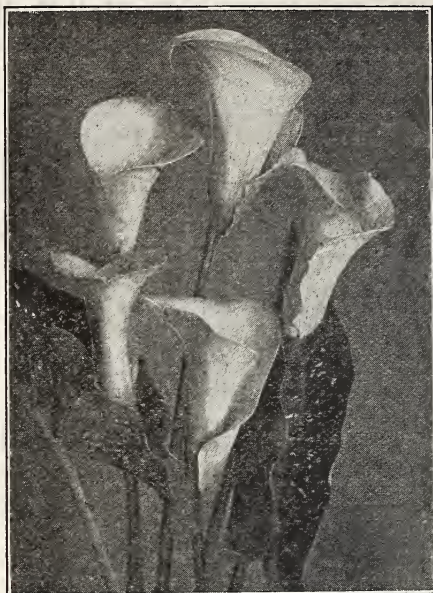
Select bulbs, each 35c; 3 for \$1.00 postpaid

See  
Hardy  
Lilies,  
page 87



DMC

Tube Rose



Yellow Calla Lily

## TUBEROSES

A very desirable and most easily grown summer flowering bulb. Easily recognized by its exquisite fragrance and beautiful spikes of white flowers, which are borne on long stems, making it an admirable cut flower for house decoration. If started in pots and then transplanted to open ground, can be had much earlier. For flowering in the open border, plant in the spring after the ground becomes warm. Bulbs in stock from February to July.

Price, 3 for 20c; 75c doz. postpaid

## AMARYLLIS

These hardy flowering bulbs are very popular for pot culture and garden. Their giant, Lily-like flowers produced on tall stems are exceedingly rich and lasting. For pot culture, 1 bulb to a 6-inch pot. In the garden, plant 1 foot apart and cover bulb about 4 inches.

**AULICA OR LILY OF THE PALACE.**—Summer and autumn bloomer. Broad foliage and large spreading, wide open flowers of rich crimson scarlet, lined and penciled white and maroon. Blooming bulbs. Each 35c

**BELLA DONNA, the Lovely Pink Bella Donna Lily.**—One of the most satisfactory, bearing on long stems clusters of 8 to 10 superb, large, beautiful pink, Lily-like flowers with a delightful fragrance. A fine fall bloomer.

Each 25c

## Cyclamen

**GIANT PERSIAN.**—These are among the most beautiful and interesting winter and spring flowering bulbs for the window and greenhouse. Not only are the flowers of striking beauty, but the foliage is also highly ornamental, consequently they are very decorative, even when not in bloom. There are no plants better adapted for pot culture, and few that produce such a profusion of bloom. Bulbs or young plants, in season, each 35c postpaid. From November to March, large choice plants in bud and flower in pots BY EXPRESS ONLY, \$1.00 to \$1.50—your choice of colors.

**POTTING SOIL.**—Ordinary garden soil and "C-M" (see page 39) mixed half and half will give excellent results for potting flowering bulbs.



# ROUTLEDGE SEED AND FLORAL CO'S

## NEW AND POPULAR DAHLIAS



GEISHA

We have probably grown and tested out more varieties of Dahlias than any other company in the Northwest, and have come to the conclusion that it is only confusing and needless to offer hundreds of varieties. So many are almost the same; many very inferior. We believe the varieties on this and the following pages will please the most critical. All are priced very reasonable and are **postpaid**. Field grown roots only.

**DELIVERY.**—We generally hold all early orders for Dahlia Bulbs until about March 1. Planting season is from April to July 1.

One of the most popular classes of Dahlias. The form and style of the flowers vary greatly; some have flat petals, others are pointed and twisted in most fantastic style. All are beautiful and produced in profusion on long slender stems; fine for cutting.

### Paeony Flowered Dahlias

**Amber Queen.**—A fine new English variety having beautifully formed flowers of largest size. Color rich amber shaded with orange scarlet; distinct and handsome.

Each 50c

**Andrew Carnegie.**—Beautiful salmon shaded bronze pink; flowers of fine size borne freely on long straight stems.

Each 25c

**Avalanche.**—Large massive flowers of wonderful substance and full to the center. Color snow white. Remarkable for its strong growth and free blooming qualities. A fine novelty from Holland.

Each 50c

**Beacon.**—A glorious new English variety, the most brilliant shade of scarlet yet produced in this section. Of fine size, freely produced. One of the most showy in the garden.

Each 60c

**Cecilia.**—Lemon yellow blending to white at the tips. Large flowers on stout stems.

Each 25c

**Dr. H. Rusby.**—Another fine yellow sort with graceful pointed petals. Very large and handsome.

Each 35c

**Duchess of Brunswick.**—Indian red, shaded apricot. Immense blooms on stout long stems. A great acquisition, being entirely distinct from other kinds.

Each 75c

**Geisha.**—The showiest and most attractive of this type yet produced. Giant blooms of fantastic shape with broad petals curiously twisted and curled, forming a flower entirely original. Color bright golden yellow suffused and marked with Indian red; harmonious and very striking.

Each 50c

**Hampton Court.**—Bold flowers of good form, of a bright mauve pink color. One of the best of this class.

Each 35c

**Hi Gill.**—Magnificent blooms of a rich golden yellow shaded with deep rosy copper. Flowers massive, produced on very long stout stems with great freedom. One of the finest varieties in any class of Dahlias.

Each 75c

**La Conner.**—A most prolific new Paeony-flowered Dahlia, with leathery dark green foliage and graceful flowers of fine size and heavy texture. Color a beautiful shade of coral or shrimp-pink with golden suffusions. Just about the color of Lyon Rose.

Each 50c

**Lady Savile.**—For brightness and fine form this variety stands unequaled among the wonderful ranges of colors exhibited in this class of Dahlias. Color rich orange scarlet, tipped buff.

Each 25c

**Mrs. T. G. Baker.**—A fine pure white variety of much grace and charm.

Each 25c

**Mrs. A. H. Elkington.**—Magnificent flowers of a bright plum color, shaded to pure white in the center. Fine tall growing variety in a color most novel and striking. Superb.

Each 25c

**Mrs. J. S. Nettleford.**—Petals are of a deep Hydrangea pink, the large ones of the body of the flower being surmounted by smaller ones curling in the center.

Each 25c

**P. W. Jansen.**—Color orange cerise shaded yellow. Heavy wide petals, nicely arranged. Flowers large and freely produced on stout long stems.

Each 35c

**Van Dyke.**—Lovely salmon, rose tinted heliotrope. Of immense size, of distinct twisted form. Fine long stout stems; a grand exhibition variety.

Each 60c



## Choice New Cactus Dahlias

Of the various types of Dahlias those of the well known Cactus form are undoubtedly the most important and best liked. There is a great diversity in the forms of the various sorts, but in the main they are characterized by the long, narrow, twisted and pointed petals of the flowers. Most of the fine petaled sorts are products of English hybridists who have worked wonders with them the last few years. Distinct from the English types are the new Hybrid Cactus sorts, most of which are coming from specialists in Holland. The following fine novelties are undoubtedly the very acme of perfection in Dahlia growing.

### =WHITE=

**The Swan.**—A beautiful new pure white variety from the famous English specialist, James Stredwick. Snow white flowers of most approved cactus form borne on stout stiff stems. **Each 75c**

**Snowdon.**—A fine free flowering pure white Cactus Dahlia having all the requisites of a good garden sort. Sturdy growing, free blooming long stiff stems, finest form and good size. **Each 50c**

**Frances White.**—Flowers of fine size and depth. Narrow petals curling and twisting in corkscrew fashion. Color, pure snow white. **Each 35c**

**Fairy.**—Beautiful clear white narrow petals, fine form, of large size, a free and constant bloomer, of distinct type. **Each 25c**

**Lawine.**—A fine pure white, of large size, perfect form and great substance, lasting in good condition for two weeks. **Each 25c**

### =PINK=

**Neptune.**—Flowers large and massive with incurving petals which twist spirally. Color deep rose pink, speckled and striped with carmine. Strong grower. The largest fancy Cactus Dahlia yet seen. **Each 75c**

**Mrs. Henry Bandle.**—Flowers of fine size and form produced with great freedom. Color pale cream changing to a lovely pink with age. A gem among Cactus Dahlias. **Each 50c**

**Miss London.**—Finely formed flowers with tubular incurved petals nicely pointed. Color deep rose pink; tips of petals tinted yellow. **Each 50c**

**Sweetbriar.**—Charming flowers of an exquisite shade of pink. Fine for both garden and exhibition and greatly admired. **Each 35c**

**Mrs. Stranock Gaskill.**—A delicate shade of exquisite pink; large finely petaled; a rare novelty of great beauty. **Each 25c**

### YELLOW=ORANGE

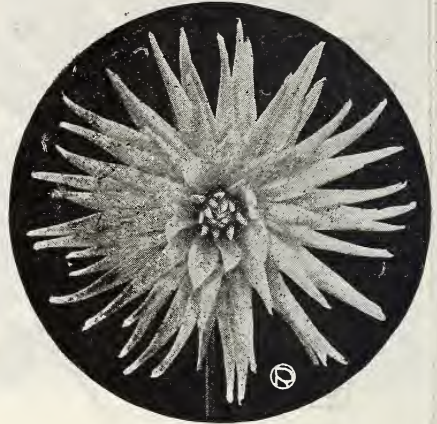
**Magnificent.**—In strong contrast to the incurving varieties this is a cactus having perfectly straight petals of great length, the flowers often measuring 9 inches. Color bronzy orange. **Each \$1.00**

**Melody.**—Very distinct, greatly admired. Flowers of fine size, of true cactus form, with great depth of bloom and petals twisted and curled in exquisite manner. Center of flower bright golden yellow while the outer half of bloom is pure white. **Each 75c**

**Richard Box.**—Beautiful clear light yellow flower of immense size and the finest incurved form. Fine erect-growing habit with flowers on stout stems well above the foliage. **Each 50c**

**Mrs. Charles Cooper.**—Flowers of the largest size and perfect cactus form with long very narrow and pointed petals finely arranged. Color creamy-yellow flushed with salmon in center. **Each 50c**

**Countess of Kenmare.**—A magnificent exhibition sort, and an excellent color; petals very fine and long, and of a rich golden amber suffused with orange. **Each 35c**



Mrs. Chas. Cooper

**Thomas G. Baker.**—Bright golden yellow flowers of fine cactus form with long narrow petals finely incurving. Growth sturdy, stems strong holding the large flower erect. **Each 25c**

### SCARLET=CRIMSON

**Soldier's Lass.**—Brilliant scarlet distinctly tipped with white on point of petals. A garden cactus flowering in great profusion and on fine stout stems. Very distinct and showy novelty. **Each \$1.00**

**W. E. Peters.**—A charming new variety with deep scarlet crimson flowers of the largest exhibition size. The long pointed petals are beautifully arranged, forming a magnificent incurved bloom; every flower comes perfect. **Each 75c**

**Herbert Baby.**—A giant among Cactus Dahlias, the flowers being of mammoth size and held upon fine erect wiry stems. Color rich purplish crimson throughout. One of the finest dark colored sorts to date. **Each 75c**

**Lavinia.**—A beautiful new English cactus variety with flowers of distinct form, the long narrow petals being spirally twisted in an exquisite manner. Color coppery red shaded madder crimson. **Each 60c**

**Conquest.**—Immense blooms of deep crimson-maroon on fine long stems. Petals very long, twisted and pointed. **Each 50c**

**Conqueror.**—Free flowering garden sort, stiff cane-like stems holding erect fine deep crimson flowers. **Each 35c**

**Othello.**—A glorious full large flower of deepest, richest crimson, center almost black; finest true cactus form; petals of great substance, free and continuous bloomer, producing the most perfect flowers. **Each 35c**

**Harbor Light.**—Orange scarlet; one of the finest for cut flowers; dwarf habit, free bloomer, with large perfect flowers on long stiff stems. **Each 25c**

The above classified under colors and arranged according to prices.



## Fine Decorative Dahlias

In this class of Dahlias will be found those sorts which florists and gardeners prize most highly for cut flowers. At recent Dahlia shows in Portland the sorts from this class have drawn much attention and are being widely called for. These Dahlias are characterized by their strong, erect growth and their very large, loosely formed flowers on strong, stiff stems far above the foliage.

**Price, Field Grown Roots, 20c each, 3 for 50c (except where noted).**

**Cuban Giant.**—This is well named, a veritable giant among Dahlias. Flowers very large, of a rich deep crimson maroon color.

**Delice.**—Pure bright rose pink; large massive flower with broad petals; beautiful form; the best of its color. **Each 25c**

**Golden Wedding.**—As its name indicates, the flowers are golden yellow, of grand size and form. The finest variety of this color in the class.

**Gaiety.**—A superb new decorative, vivid scarlet, heavily marked with pure white. It is a variety far above the average of the fancy type.

**Glen Eyrie.**—A superb new lemon yellow. A large finely-formed flower borne on good stout stems. Some of the flowers show tips of white.

**Hortulanus Piet.**—Colossal flower of delicate shrimp pink, the tip of each petal touched with gold. **Each 50c**

**Hortulanus Witte.**—Giant white variety. Splendid for cut flowers and exhibition purposes. **Each 50c**

**Jack Rose.**—Brilliant crimson red, rich and glowing, similar in shade to the popular "Jack" Rose, which suggested its name.

**La France.**—Its beautiful soft yet lively color, a glowing rose pink, together with its perfect shape, stout stiff stems makes this one of the most valuable for cutting.

**Le Grande Manitou.**—Immense blooms on stout stems. Color, bluish white distinctly splashed with violet red.

**Mina Burgle.**—A giant in growth and bloom. Immense deep scarlet flowers of finest cut flower grade with long stout stems holding flowers erect and possessing remarkable keeping qualities when cut. The foliage is also very ornamental, very dark green and of heavy texture. Every shoot bears a flower. Florists are growing this fine Dahlia exclusively for cut flowers. **Each 25c**

**Mrs. Winters.**—Very large, waxy white flowers on stately and erect stems. No finer white Dahlia than this superb decorative variety.



**Delice**

**Perle de Lyon.**—Beautiful pure white flowers with broad petals nicely serrated at the tips, giving the bloom a unique appearance.

**Sylvia.**—Deep rose color, of large size and fine form. Petals beautifully quilled.

**Virginia Maule.**—Very large well formed flowers of ivory white delicately suffused with lavender and shrimp pink. One of our most beautiful sorts.

**Wm. Agnew.**—Large stately flowers of a rich glowing crimson. One of the best.

**Yellow Colosse.**—Immense blooms, primrose yellow. One of the largest varieties extant.

**Willmore's Masterpiece.**—Honey yellow, overlaid with golden rose or tango color. A giant in growth and size of bloom and a variety of the highest degree of merit. **Each 40c**

## Fine Show and Fancy Dahlias

In this section we have the Dahlias of our grandmother's garden, with their richly colored flowers of rounded form and quilled petals. Some are delightfully edged and splashed with contrasting colors, and all are as beautiful as it is possible to imagine for garden decoration.

**Field Grown Roots, 20c each, 3 for 50c; set of 12 sorts, \$2.00 postpaid**

**Juanita Ford.**—Very large round flowers on long stems; deep cardinal red. One of the best dark varieties.

**Lucy Fawcette.**—Beautiful fancy show Dahlia. Delicate sulphur yellow, lightly flaked and striped with crimson. Very handsome.

**Margaret Bell.**—Bright carmine rose color. A fine show dahlia.

**Pioneer.**—Larger round flower of rich crimson maroon, of velvety texture. A grand dark sort.

**Yellow Beauty.**—Golden yellow. Produced on long straight stems. A gem for cutting.

**Snowball.**—Large round flowers of snowy whiteness. Wonderfully free in bloom and healthy grower.

**Susan.**—Delicate shell pink flowers of the most perfect outline. Robust in growth and very free. A fine variety.

**A. D. Livoni.**—Soft shell pink, of medium size and rounded form. One of the most beautiful. Grown extensively by florists for cut flowers. Its pretty quilled petals form an elegant flower.

**Arabella.**—Yellow ground tipped and shaded with pink, an unusual combination of colors. A beautiful variety.

**Bon Ton.**—Bright scarlet flowers of perfect outline in great profusion. An old but fine variety.

**Frank Smith.**—Deep crimson, petals tipped white. The finest fancy Dahlia in cultivation. Dwarf, very early and continuous bloomer.

**Gloire de Lyon.**—Large globular pure white flowers of waxy substance. An old but still one of the very best Show Dahlias.



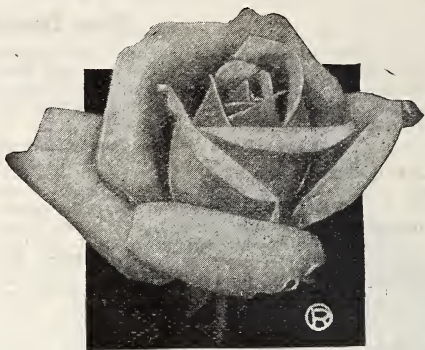
## CHOICE ROSE PLANTS

For Spring and Early Summer Planting  
Only and NOT for Fall Delivery

On this page we are offering four choice collections. This is the popular mail order size that we send by mail prepaid. They are grown in 3-inch pots, are strong, healthy and well rooted and from 10 to 12 inches high. To be planted outside in the warm, spring or early summer months.

These will not produce many blooms the first season, but you will be surprised at the results you can obtain, and at quite a saving in prices.

**NOTE.**—Order any time convenient and we will forward "in season." **NO ORDER FILLED FOR LESS THAN 50c.**



### Gorgeous Collection of New Roses

Price, 25c each; set of 6 sorts, \$1.25 postpaid

**CLEVELAND.**—Old rose shaded with copper at base of petals. Large flower, handsome foliage.

**GORGEOUS.**—Orange yellow, heavily bordered with reddish copper. Large finely formed buds and flowers freely produced.

**HOOSIER BEAUTY.**—Glowing crimson-scarlet with maroon shadings. Beautiful buds on long stems. Wonderfully free in bloom. A valuable new American rose.

**OPHELIA.**—Salmon, flesh, shaded rose, base of petals apricot yellow. Fine shaped flowers. Excellent habit.

**SUNBURST.**—Without doubt the finest yellow rose in existence. Large buds and flowers of an orange copper color, shaded golden yellow. Superb.

**TIPPERARY.**—Bright lemon yellow; exquisitely shaped buds opening into finely formed flowers. A fine decorative rose.

### Beauty Collection Choice Roses

Price, 15c each; set of 12 sorts, \$1.25 postpaid

**American Beauty.**—Large rosy crimson flowers; sweet-scented.

**Betty.**—Coppery pink; long, beautiful buds.

**Florence Pemberton.**—Large white flushed peach. Strong grower.

**General McArthur.**—Grand crimson scarlet. One of the finest.

**Helene Cambier.**—Coppery yellow, beautifully shaped buds.

**Mad. Abel Chatenay.**—Salmon pink, shaded darker. Always in bloom.

**Mad. Caroline Testout.**—The famous Portland rose. Large, bold, bright pink flowers.

**Maman Cochet.**—Beautiful rosy pink. Long pointed buds.

**Richmond.**—Crimson scarlet buds. A beautiful free flowering variety.

**Souv. de P. Notting.**—Rich yellow, bordered pink.

**Souv. de President Carnot.**—Shell pink and fawn.

**White Maman Cochet.**—Pure white; elegant buds.

### Rainbow Collection Everblooming Roses

Price, 15c each; set of 12 sorts, \$1.25 postpaid

**Dean Hole.**—Bright carmine with silvery shadings.

**Earl of Warwick.**—Salmon pink, shaded with vermillion and gold.

**Kaiseress Augusta Victoria.**—Large pure white; very free and constant.

**Lady Ashtown.**—Silvery pink, shaded yellow. Fine large bloom.

**Lady Battersea.**—Bright cherry crimson, long pointed buds.

**La France.**—Silvery pink, large and very sweet-scented.

**Marie Van Houtte.**—Light yellow, flushed carmine.

**Papa Gontier.**—Cherry red, shaded yellow. Grand bedder.

**Rainbow.**—Creamy pink striped and mottled crimson.

**Safrano.**—Apricot yellow, tinged fawn; beautiful buds.

**Virginia R. Coxe** (Gruss an Teplitz).—Fiery scarlet.

**Viscountess Folkstone.**—Delicate flesh pink; full and handsome.

### Glorie Collection Hardy Roses

Price, 15c each; set of 12 sorts, \$1.25 postpaid

**Anna de Diesbach.**—Beautiful clear carmine pink.

**Baron de Bonstettin.**—Dark, rich red; very large.

**Clio.**—Massive, light pink flowers.

**Conrad F. Meyer.**—Beautiful silvery pink.

**General Jacqueminot.**—Bright crimson.

**Glorie Lyonnaise.**—Chamois yellow; full, sweet, distinct.

**Margaret Dickson.**—Ivory white, shaded flesh.

**Mrs. R. G. J. Crawford.**—Silvery pink; fine form.

**Mrs. John Laing.**—Soft, delicate pink; free flowering.

**Paul Neyron.**—Large, deep rose; double and handsome.

**Prince Camille de Rohan.**—The best dark maroon.

**Ulrich Brunner.**—Rich, glowing crimson; large.

For Climbing and Rambler Roses See Page 99

**PLEASE REMEMBER.**—We cannot afford to pack and wrap a single Rose Plant; no order filled for less than 50c.



## CHOICE FIELD GROWN ROSE BUSHES

We make a specialty of Rose Bushes and sell thousands upon thousands. Our bushes are strong, healthy field grown stock, well rooted, and will produce a profusion of bloom the first season, if given good care and cultivation. We enjoy the reputation of supplying the best stock at reasonable prices. The following list is the choicest of American and European introductions.

### FOR YOUR CONVENIENCE—CLASSIFICATION UNDER COLORS

This year we have arranged our Roses all under their predominating color, which appeals to us as the most convenient way. While the descriptions are necessarily short on account of limited space, you will get class (read abbreviations below), color and main points of merit.

### SHIPPING AND DELIVERY

We can fill orders for our large 2-year-old Rose Bushes any time from October to May—around Portland the best planting time is during favorable weather from November to April, the earlier the better.

**BY EXPRESS.**—We ship all 2-year-old Rose Bushes by express, unless otherwise instructed. **BY PARCEL POST**—by request we will wrap and pack for mailing at 10c each, 50c doz., plus postage at P. P. rates, figuring 2 lbs. per bush, 15 lbs. per doz.

### Abbreviations

**T.—TEA**—One of the best classes of Roses and truly ever blooming. They are hardy in this section, although during our coolest weather and in cold sections they should be protected with a covering of fir boughs, straw or burlap.

**H. T.—HYBRID TEA**—Most of these are as free flowering and as constant bloomers as the teas, and are harder, stronger growers.

**H. P.—HYBRID PERPETUAL**—The hardiest of all roses, vigorous in growth, free blooming.

### White Roses

**Alice Grahame (H. T.)**—Ivory white, tinted salmon; a free and continuous blooming rose of great merit. Each 60c and 75c

**Frau Carl Druschki (H. P.)**—A large, grand, hardy, pure white; best and most popular. Each 40c and 50c

**Ethel Malcolm (H. T.)**—Ivory white, with a delicate peach center; of perfect formation. It is as good a grower and bloomer as "Caroline Testout." Each 75c; 3 for \$2.00

**Mabel Morrison (H. P.)**—Splendid white garden and exhibition rose. Flowers large, globular, full and sweet. Each 40c and 50c

**Mrs. Foley Hobbs (T.)**—Immense flowers of ivory white, delicately tinged pink on edge of petals. A great bedding rose.

Each 60c and 75c

**William R. Smith (H. T.)**—A cross between Kaiserin Augusta Victoria and Maman Cochet; one of our best bedding roses; flowers large, of elegant form; creamy white with rose shadings.

Each 40c and 50c

### Yellow Roses

**Alex. Hill Gray (T.)**—Vigorous, free flowering, very fragrant and of a deep lemon yellow. Each 60c and 75c

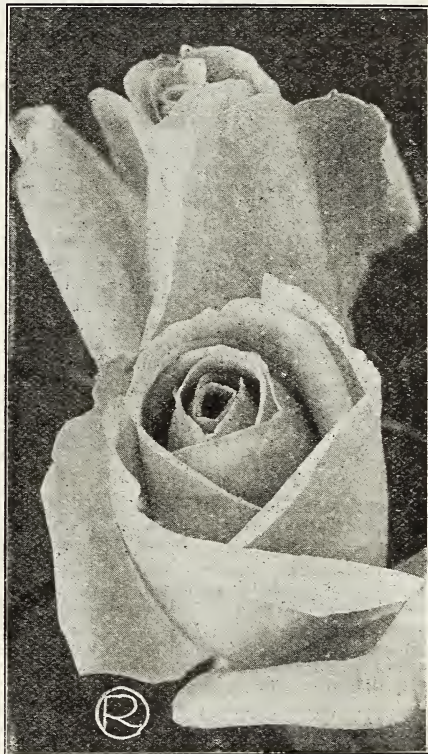
**Constance.**—Buds long and pointed, of a rich orange yellow color distinctly streaked and splashed with crimson near base of petals, passing to large full flowers of bright cadmium yellow. Very free in bloom. A glorified Rayon d'Or. Each \$1.00

**Etoile de Lyon.**—Of vigorous, sturdy growth; it blooms freely, producing beautifully formed flowers of a rich, golden yellow. A great favorite everywhere.

Each 50c and 60c

**Harry Kirk (T.)**—Magnificent long pointed superb buds of a lovely deep sulphur yellow color, becoming lighter at the edges of the petals. Of fine substance and very lasting.

Each 50c and 60c



Constance

**Imogen.**—Center of flowers orange yellow, shading to pale yellow and creamy white at the outside; beautiful long pointed buds opening to flowers of exquisite form.

Each \$1.00

**Lady Roberts (T.)**—Rich apricot yellow, base of petals coppery red shaded with orange. Nice long sharply pointed buds developing into well formed open flower; of great merit.

Each 40c and 50c

**Le Progress.**—Nankeen yellow bud, opening to saffron yellow. Flowers large and full on long erect stalks clothed with beautiful green foliage. Always in bloom. It should become popular in our Pacific Northwest gardens.

Each 50c and 60c

**TWO PRICES.**—We quote 2 prices on most varieties. The higher price is for "EXTRA SELECTION" in root, top and shape.



**PLEASE NOTE.**—Should we be sold out and unable to obtain the varieties of **Roses** ordered, others similar or better and **CORRECTLY LABELED** will be substituted, **UNLESS OTHERWISE ORDERED.**

## Yellow Roses—Continued

**Lady Hillingsdon (H. T.)**—Deep apricot yellow, long pointed bud. **Each 50c and 60c**

**Mad. Melanie Soupert (H. T.)**—Saffron yellow suffused with carmine and pink. A great favorite. **Each 50c and 60c**

**Marquis de Querhoent.**—Lovely golden yellow, copper, salmon and china-rose; superb. **Each 75c and 85c**

**Mad. Leuillot (H. T.)**—Golden yellow, tinted carmine; large, full and globular; fine semi-climber. **Each 50c and 60c**

**Mrs. David McKee.**—Immense blooms on strong thornless canes. Fine form and great substance; color creamy yellow. **Each 50c and 60c**

**Mrs. Peter Blair (H. T.)**—Lemon chrome with golden yellow center; free and continuous bloomer of exceptional merit. **Each 60c and 75c**

**Perle des Jardins (T.)**—Beautiful, clear, golden yellow, entirely distinct from any other variety. **Each 50c and 60c**

**Queen Mary.**—Another fine new Irish Rose of great beauty and refinement; flowers beautifully formed and very freely produced. Color, chrome yellow bordered at edge of petals with carmine; a new and delightful combination of colorings. **Each \$1.00**

**Rayon d'Or or Golden Rays (H. T.)**—A gorgeous new golden yellow rose; superb. **Each 60c and 75c**

**Safrano (T.)**—Bright apricot yellow, tinged orange; beautiful buds; delicious tea scented. **Each 35c and 50c**

**Sunburst (H. T.)**—Rich cadmium yellow, shaded orange. The buds are very long and beautiful form, opening into a gorgeous colored flower. **Each 60c and 75c**

## Pink Roses

**Baroness Rothchild (H. F.)**—Large size, fine globular form; color bright rosy pink. **Each 35c and 50c**

**Belle Siebrecht.**—Superb; of brilliant pink color, sweetly perfumed, flowers large, buds long and tapering. **Each 40c and 50c**

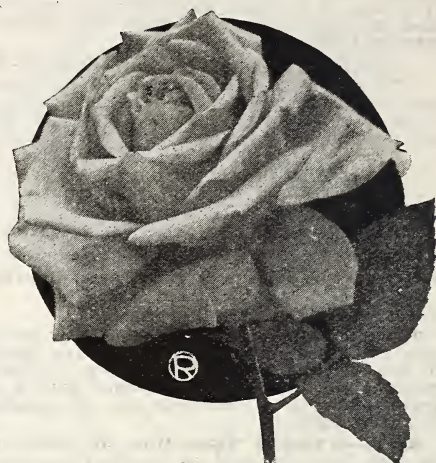
**Charles Dinree.**—A superb new rose of American origin, producing elegant shaped buds and open flowers; of an exquisite silvery pink color and sweetly perfumed. **Each 50c and 60c**

**Countess of Gosford (H. T.)**—Clear salmon pink, base of petals shading to saffron yellow, very vigorous; perpetual bloomer. **Each 40c and 50c**

**Edgar M. Burnett (H. T.)**—Very large full flowers of fine shape and form, with large flesh colored petals tinted rose. A great improvement of "La France," the sweetest scented rose in existence; a really superb rose. **Each \$1.00**

**Duchess of Sutherland.**—Growth erect and vigorous, with large full finely formed flowers on stout canes. Color, warm rosy pink with lemon yellow shadings; sweet scented. **Each 60c and 75c**

**George Arends or Pink Frau Karl Druschki**—A beautiful pink variety; different in color from any other rose; a free bloomer and one of the best. **Each 50c and 60c**



**Queen of Fragrance**

Kansas City, Mo., May 16, 1918.

Routledge Seed & Floral Co.,

Dear Sirs: I received the Rose Bushes all in good shape, well put up and wet. Now they are in the ground and looking good. I am very thankful to you.

E. W. PATRICK.

**Killarney.**—Mildews badly; try Mad. Leon Paine, superior variety. **Each 35c and 50c**

**Lady Ursula (H. T.)**—Truly magnificent; a delightful shade of flesh pink. **Each 40c and 50c**

**Madame Leon Paine (H. T.)**—A beautiful salmon pink overlaid with silvery white, center yellow; similar but better than Killarney. **Each 35c and 50c**

**Madame Caroline Testout (H. T.)**—Portland's famous brilliant pink rose. **Each 35c and 50c**

**Miss Cynthia Ford.**—Deep rose pink of unequalled brilliancy; large massive buds and flowers of elegant form and texture; blooms in great profusion during the entire season. **Each 50c and 60c**

**Mme. Gabriel Luizet.**—Light silvery pink; grand flower; free bloomer; fragrant; hardy plant. One of the best. **Each 50c and 60c**

**Mrs. Joseph H. Welch.**—A very brilliant rose pink, very large, artistically arranged flower of unusual form, with immense guard petals, delicately scented. **Each 60c and 75c**

**Queen of Fragrance.**—Flowers large, double and of elegant graceful shape and freely produced throughout the season; the color is a beautiful shell pink, tipped with silver, bright and pleasing. Its delicious fragrance won for it the \$375 Clay Challenge Cup. **Each \$1.00**

**William Shean.**—A fine grower; large pointed flowers of purest Killarney pink, full, free and a perpetual bloomer; immense size, perfect form. **Each 40c and 50c**

Prune your rose bushes when planting—don't leave over 12 to 15 inches of top growth. Try it; you'll get better results.



All 2-year-old rose bushes by express unless otherwise ordered. Read about shipping, top of page 95.

## Red, Scarlet and Crimson

**Alfred Colomb.**—Extra large, round flowers, very double and full; color clear cherry red, passing to bright, rich crimson; very fragrant. **Each 40c and 50c**

**Augustus Hartmann.**—Brilliant geranium red flushed orange; very large, well formed flowers with high pointed center. **Each 75c and 85c**

**Avoca (H. P.)**—Brilliant, velvety crimson; buds long; flowers large, sweetly perfumed. **Each 35c and 50c**

**Captain Hayward.**—This is probably the grandest of all red hybrid perpetuals. The bloom is of the largest size. Color, deep glowing red, flushed with crimson; deliciously perfumed. **Each 40c and 50c**

**Chateau de Clos Vougeot (H. T.)**—A very rich, fiery scarlet shading to deep velvety crimson. It is delightfully fragrant, a prolific and continuous bloomer. **Each 50c and 60c**

**Duchess of Albany (Red La France).**—The flowers are very double and full and deliciously sweet; color lovely rose pink, very deep and exquisitely shaded. **Each 50c and 60c**

**Duke of Edinburgh.**—Rich, bright vermilion; extra large and full; a distinct and splendid variety. **Each 35c and 50c**

**Farbenkonigen (Queen of Colors).**—This is well named the Queen of Colors: there is no finer rose grown than this beautiful sort. It is large and full; color bright carmine and rosy crimson overlaid with a satiny silver sheen. Very floriferous; simply grand. **Each 50c and 60c**

**George Dickson (H. T.)**—A velvety blackish crimson with the back of the petals heavily veined with pure crimson maroon. A large, grand, magnificent flower. **Each 50c and 60c**

**George C. Waud.**—Glowing orange vermilion shaded bright scarlet; one of the richest colored roses in existence. **Each 60c and 75c**



Mrs. Chas. Russell

Marietta, Ohio, April 5, 1918.

Routledge Seed & Floral Co.,

Gentlemen: In the spring of 1917 I ordered of you one dozen rose bushes (the *Caroline Testout*), and they have done wonderfully; in fact they commanded the attention of every one.

Yours very truly,

G. HENRY MEISTER.

**General Superior Arnold Jensen.**—Fine long well formed buds, perfectly formed well filled flowers of fine size; color deep glowing carmine tinted with rose; free blooming, of great merit. **Each 60c and 75c**

**Gloire de Chedane Guinoisseau.**—Very large, full, globular flowers of brilliant vermilion red, with velvety shadings; no other variety excels this for color and style. **Each 50c and 60c**

**His Majesty (H. P.)**—The *Crimson Druschki*. Dark, deep crimson, shaded deep vermilion crimson towards the edges; of great size. **Each 40c and 60c**

**Lady Battersea.**—This variety has long, oval buds, sharply pointed, very striking in form; the color is a bright, cherry crimson. **Each 35c and 50c**

**Mad. Abel Chatenay.**—A rose of extraordinary merit. A free bloomer, with flowers of good size and substance. Color, beautiful rosy carmine with darker shadings. **Each 35c and 50c**

**Marshall P. Wilder.**—Color, rich ruby red changing to lovely scarlet maroon; very beautiful sort for general planting. **Each 35c and 50c**

**Mrs. Charles Russell.**—Flowers very large and massive; form globular and very full. Remarkable for its fine lasting qualities either on or off the plant. Color bright rich cerise shaded to scarlet at center. A continuous bloomer all season through. **Each 75c**

**Ulrich Brunner (H. P.)**—Extra large bold flowers, full and globular; color, rich glowing crimson, elegantly flamed with scarlet; a good grower and free bloomer. **Each 35c and 50c**

**Red Letter Day.**—Brilliant glowing crimson scarlet, opening into medium sized cactus shaped flower of curious formation; one of the freest blooming roses extant. **Each 75c and 85c**



Genl. S. A. Jensen

**SHOULD BUSHES ARRIVE VERY DRY,** bury tops and all in damp ground or immerse in a tub of water for a few days. It will benefit them very much.



**PLEASE NOTE.**—Should we be sold out and unable to obtain some certain varieties of Roses ordered, others similar or better and **CORRECTLY LABELED** will be substituted, **UNLESS OTHERWISE ORDERED.**

Medford, Oregon, April 10, 1918.  
Routledge Seed & Floral Co.,  
Gentlemen: Thanks for helpful letter. The  
Rose Bushes you sent me are doing splendidly;  
the best I ever had, and I shall come to you  
for more next Fall.

Yours respectfully,  
DR. J. L. HILL.

## Tricolors—Shades of Yellow, Orange, Gold, Red or Pink

**Beaute de Lyon.**—Large refined flower of a rich coral red, nicely shaded with yellow; a seedling of Soliel d'Or; very superior to that variety both in growth and flower.

Each 60c and 75c

**Edu Meyer (H. T.)**—Superb, lovely combination of copper, red and yellow; good size and form.

Each 60c and 75c

**Hugo Roller.**—Color rich lemon yellow, petals edged and suffused with crimson; a most distinct and beautiful variety.

Each 50c and 60c

**Irish Fireflame.**—These buds are wonderfully rich in coloring; opening to a large single flower; old gold, shaded ochre.

Each 50c and 60c

**Gorgeous (H. T.)**—Flowers large and full, freely produced on stiff, erect stems; color deep orange yellow, flushed copper yellow, and veined with reddish copper.

Each 60c and 75c

**Joseph Hill (H. T.)**—Salmon pink, shaded with yellow outer petals tinted coppery pink, long bud; very large, full flowers.

Each 50c and 60c

**Juliet (H. P.)**—Very attractive; inside of petals golden yellow, outside rosy red; large, full, fragrant.

Each 50c and 60c

**Leonie Lamesch (Polyanthus).**—Deep coppery red, shaded with yellow; dainty and attractive.

Each 75c

**Lyon (H. T.)**—Distinct; shrimp pink with salmon and chrome yellow shadings; beautiful beyond description.

Each 60c and 75c

**Lady Greenall.**—Intense saffron orange, heavily zoned and overspread on deep creamy white; reflex of petals faintly suffused delicate shell-pink; large, perfect, fragrant. A truly magnificent rose.

Each \$1.00

**Madame Edouard Herriot.**—Long pointed buds, a deep coral red color shaded to yellow at the base; flower of a rare shade of rosy scarlet flushed with shrimp and apricot tints.

Each 50c and 75c

Alderdate, Wash.

Routledge Seed & Floral Co.,

Gentlemen: The Roses ordered from you arrived in first-class condition and we are well GALY TWO—Routledge Testimonials ..... pleased with them. You may send me a Japanese Snouball for the balance due me. I received your premium also, which very much pleased Mr. Lee. I am

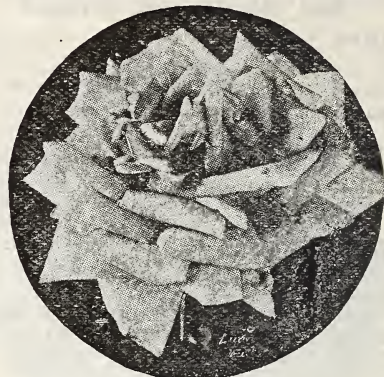
Yours truly,

N. E. LEE.

### "C-M" YOUR ROSE BEDS

The most beautiful roses are produced by care, cultivation and fertilizer. "C-M" kiln-dried (weed free) ground cow manure, better than the raw material, will do wonders and is much cleaner and nicer to handle. See page 39.

**TWO PRICES.**—We quote 2 prices on most varieties. The higher price is for "EXTRA SELECTION" in root, top and shape. All 2-year-old rose bushes by express unless otherwise ordered. Read about shipping, top of page 95.



Ophelia

**Mad. Phillippe Rivoire (H. T.)**—Apricot, shaded pale carmine; large, full, well-formed flowers; very free.

Each 75c

**Mademoiselle Cecile Brunner (Dwarf Polyanthus).**—Exquisite little roses, buds dainty, pointed, bright salmon pink, yellow center.

Each 35c and 50c

**Mrs. A. Waddell (H. T.)**—Color, deep reddish apricot toned with salmon; long pointed buds.

Each 50c and 60c

**Mrs. Alfred Tate (H. T.)**—Coppery red, shaded fawn, with a distinct ochre shading; a wonderful long perfect-pointed bloom; free flowering, sweetly scented, distinct.

Each 60c and 75c

**Mrs. E. G. Hill (H. T.)**—Outside of petals coral red, inside alabaster white; well formed, medium sized flowers of splendid decorative effect.

Each 60c and 75c

**Mrs. Frank Bray (H. T.)**—A rich deep coppery ecru, developing as the flower opens to a very delicate coppery fawn with a shading of ivory shell pink.

Each \$1.00

**Old Gold (New).**—A vivid reddish orange with rich coppery red and coppery apricot shadings. Long dainty buds lasting a long time in perfect condition.

Each 75c

**Ophelia (H. T.)**—The most popular cut flower variety today. Buds orange salmon, opening to a perfect full flower of dainty salmon pink and cream; elegant shape, fine foliage, superb.

Each 60c and 75c

**Rainbow (H. T.)**—Pink striped and splashed with bright carmine; good shaped buds, with petals; free flowering, distinct.

Each 40c and 50c

**Willomere (H. T.)**—An improvement upon the famous Lyon Rose; more vigorous, stronger stems. Long, elegant buds, coral red suffused with carmine, opening into a large full flower of a rich shrimp pink, shaded to yellow at the center.

Each 75c and \$1.00

### Moss Roses

Strong vigorous growers, much admired for moss-covered buds; hardy; most varieties bloom but once in a season, but remain for a long time and very handsome.

Your choice, White, Pink or Red, 50c each.



## Climbing Roses. Hardy, Large Flowering

The lavish profusion of bloom on climbing Roses, literally hundreds of flowers on each plant, their beautiful colors and exquisite fragrance render them unequalled for covering houses, arbors, pergolas, fences and boundary walls.

1-year-old plants, from March to July, 20c each; 4 for 60c, postpaid



Climbing Cochet

### TRY THIS NEW ROSE

**WICHMOSS.**—A real climbing Moss Rose; glazed foliage, buds heavily mossed; open flowers are semi-double and daybreak pink; very hardy; a wonder. 2-year only, 75c

### MEMORIAL ROSE

**WICHURAIANA.**—The trailing White Memorial Rose. Will grow in sun or shade. Makes a beautiful display of blossoms, single and very large, pure satiny white with bright golden stamens in center. Very desirable for covering graves or cemetery lots; for banks, etc.; not a climber. 2-year only, 50c

## RAMBLER OR PILLAR ROSES

The following climbing Roses all grow vigorously, and are profuse bloomers and very hardy anywhere. The flowers are borne in large clusters.

1-year-old, from March until July, first 4 sorts, 20c each; 4 for 60c, postpaid

**Crimson Rambler.**—This grand rose is well known and very popular; of rapid growth; flowers in trusses, fairly covering the plant from the ground to the top.

Each 35c and 50c

**Dorothy Perkins.**—(See illustration). Flowers in immense clusters, beautiful shell pink, very double with petals artistically crinkled.

Each 35c and 50c

**Thousand Beauties.**—Entirely distinct. Large single flowers fully 3 inches across; a delightful shade of soft pink, shaded carmine and produced in trusses of from 10 to 15 flowers, each truss a veritable bouquet.

Each 40c and 50c

**White Dorothy.**—As its name indicates, it is a sport from Dorothy Perkins, possessing all the fine qualities of that grand variety, but having pure snow white flowers.

Each 35c and 50c

**Yellow Rambler (Aglaia).**—Strong grower, profuse bloomer.

Each 40c and 50c

**Billard et Barre (T.)**—Orange yellow; distinct, very charming; rare, moderate climber.

Each 60c and 75c

**Climbing Belle Siebrecht.**—Imperial pink, large and beautifully formed; sweetly perfumed.

Each 40c and 50c

**Climbing Killarney.**—A climbing sort of the famous Irish rose, Killarney; rank in growth and free blooming; flowers a beautiful shell pink color; finely shaped buds.

Each 35c and 50c

**Climbing Papa Gontier.**—Splendid cherry-red flowers; strong climbing habit.

Each 40c and 50c

**Climbing Richmond.**—Very free and vigorous; bright crimson.

Each 40c and 50c

**Climbing Safrano (Reve d'Or).**—A beautiful saffron yellow, very desirable.

Each 35c and 50c

**Climbing White Cochet.**—Flowers white, edged pink; beautiful form and substance; strong grower, perpetual bloomer.

Each 40c and 50c

**Dr. Van Fleet.**—Flowers large, petals beautifully undulated and cupped; beautiful shell pink; elegant shaped buds, handsome bronze green foliage; a rank climber, immune from mildew.

Each 40c and 50c

**Madam Alfred Carriere.**—Extra large, very double and sweet, profuse bloomer, white, tinged pale yellow.

Each 50c and 60c

**Marechal Neil.**—The popular fragrant golden yellow climber, but not as hardy as others.

Each 40c and 60c

**Pillar of Gold.**—A most vigorous climber; produces large double buds and flowers of perfect form. Color, rich apricot shaded with carmine and Indian red.

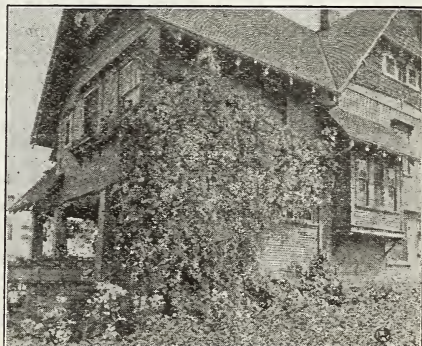
Each 35c and 50c

**Silver Moon.**—Large, semi-double blooms of good substance with golden stamens. Foliage bronze green and is immune to mildew.

Each 50c and 60c

**William A. Richardson.**—Color, rich copery yellow flushed with carmine; a very beautiful variety.

Each 40c and 50c



Dorothy Perkins, 30 ft. High, Thousands of Blooms

All 2-year-old rose bushes by express unless otherwise ordered. Read about shipping, top of page 95. For rose fertilizers, see pages 38-39.



## Hardy Flowering and Ornamental Shrubs

Shrubs, deciduous and evergreen, are as much a part of the well balanced garden as the lawn or flower borders. They are ornamental and highly useful as cut flowers. A well arranged planting presents an attractive appearance throughout the entire year.

Shrubs have many uses, such as a dividing line between the flower and the vegetable garden, or between the lawn and uncultivated land beyond; as a background to a flower border; for hiding an unsightly building, fence or foundation, or they may be planted in a mixed shrubby border, in which case those of short, dense growth should be planted along the front of the border, graduating to the tall-growing kinds at the back.

**SHIPPING.**—At the prices given we send large, well branched bushes from 2 to 5 years old, grown in the open ground. As our shrubs are for the most part large and heavy, we usually send them by express or freight. **By request,** small orders can be sent by parcel post, but you should add at least 10c to 20c extra per single plant to cover packing and postage.



Flower Spray of Crenata Deutzia

**ALTHEA (D)**—Rose of Sharon.—These beautiful shrubs bloom very freely in August and September; worthy of a place in every garden. Our collection comprises double varieties. **Pink and White.**

Each 50c to 75c

**AZALEA (D).**

**Mollis.**—Blossoms in early spring, before the leaves appear. **Pink or White** only. 2 ft., each \$1.50

**BERBERIS (D) (Barberry).**—Fine for massing, banking, hedges or even as single specimens. Dainty, early flowers, showy small leaved foliage and berries in the fall and winter make them very popular.

**Thunbergii.**—A beautiful Japan variety of dwarf habit. Small foliage, changing to beautiful red in autumn. Bright scarlet berries all winter. **Each 60c to 75c**

**Vulgaris (Common European).**—Yellow flowers in drooping racemes in early summer, followed in autumn by orange-scarlet fruit. **Each 50c, 60c and 75c**

**Purpurea (Purple Barberry).**—Foliage a beautiful deep purple all the year; a splendid specimen shrub and almost indispensable in contrastive groupings. **Each 50c, 60c and 75c**

**BAMBOO.**—A very ornamental Oriental plant. Excellent for certain effects.

**Metake.**—Small plants, each 35c; large, 50c to \$1.50; specimen clumps, \$2.00 to \$5.00

**COTONEASTER.**—Choice evergreen with minute, deep, glossy green foliage and bright red berries that hang on all winter.

**Horizontalis.**—A plant of prostrate habit of growth; admirable for covering low walls or to use in rock work. Choice plants, each 60c, 75c, \$1.00 and \$1.50.

**Myerophylla.**—Truly evergreen; berries not so bright. **Each 75c to \$1.50.**

**Simondsii (D).**—A beautiful upright shrub with fruit of a rich, deep orange color. **Each, 75c to \$1.50.**

**CLETHRA (D)**—Sweet Pepper Bush.

**Alnifolia (Sweet Pepper Bush).**—An upright, slow growing shrub, with spikes of fragrant white flowers in midsummer. **Each, 50c and 75c.**

**DEUTZIAS (D).**—Their hardihood, fine habit, luxuriant foliage and profusion of attractive flowers in May and June render them among the most beautiful and most popular of flowering shrubs.

**Price, your choice, 50c to 75c and up.**

**Crenata Rosea.**—Grows 4 to 6 feet tall. Flowers very dainty and pretty; white, tinged rose; very double and full.

**Candida.**—Low growing, compact; covered all over with pure white, bell-shaped flowers.

**Lemoinei.**—Flowers very large and produced in broad-based, cone-shaped heads of from 20 to 30 flowers each, of purest white. 3 to 4 feet.

**Pride of Rochester.**—Flowers very double and full; pure white, tinged with blush; great profusion. Grows 4 to 6 feet.

**DOGWOOD (D)**—Cornus.

**Sibirica (Red Siberian Dogwood).**—A rare and remarkable variety with bright red bark in winter. **Each 50c and 75c.**

**EUONYMUS (E).**—Compact growing evergreen shrub.

**Japonica.**—All green leaves or variegated. Very attractive. 1 to 1½ ft., 75c to \$1.00 each.

**Radicans (E).**—Very hardy trailing plant for banks or rockeries. Small, 35c; large, 75c to \$1.00 each.

**FLOWERING CURRANT (D)**—Rebis.—The Flowering Currants are gay, beautiful shrubs in early spring; crimson flowers. **Each 50c to 75c.**

**FORSYTHIA (D) Golden Bells.**

**Viridissima.**—Blossoms early in spring, before the leaves appear, when it is covered with golden, bell-like flowers. **Each 3 to 4 ft., 60c to 75c.**

**Suspensa (Weeping Golden Bell).**—Somewhat pendulous in habit. **Each 75c to \$1.00.**

**ABOUT PRICES.**—The higher prices are for specimen plants, for a large display and immediate effect.



**GEINSTA (E) Broom Bush.**

**Scoparia (Scotch Broom).**—Rapid growing; yellow flowers in May. Each 35c to 50c.

**Alba.**—Pure white. Each 50c.

**Andreana.**—Red and yellow flowers; very pretty. Each 50c.

**HAWTHORNE (D).**—A beautiful flowering shrub that grows to be a fair-sized tree.

**Double White or Red.**—5 to 6 ft., 75c; 6 to 8 ft., \$1.00 up.

**HYDRANGEA (D).**

**Hortensia.**—One of our most popular and showy lawn plants. Often grows in pots or tubs. Ornamental foliage and beautiful flowers in large, flat trusses. (See cut.) The beautiful pink variety is most popular, but we can supply **White, Pink or Blue.** Young plants, 35c; blooming age according to size and number of shoots, 50c, 75c, \$1.00 and up to \$2.50 for large specimens.

**Hydrangea Hortensia**

**LILACS (D)—Syringa.**—Everyone loves the lilac and no garden is complete without one or more. The new imported grafted varieties are very beautiful and produce magnificent large flowers.

**Common White or Purple.**

Each 50c to 75c; large specimens, \$1.00 to \$2.00.

**Imported Budded Varieties.**—Your selection following named varieties, 3 to 4-year-old select plants, 3 to 4 feet and up, \$1.00 to \$1.25; specimens, 4 to 6 feet, branched, \$1.50 to \$2.00 (not mailable).

**George Belair (Single).**—Beautiful flowers, purple.

**Marie LeGraye (Single).**—Beautiful creamy white flowers of immense size.

**Mme. Lemoine (Double).**—Fine double white variety; very fragrant.

**Mad. Casimier Perier (Double).**—Fine creamy white.

**Michael Buchner (Double).**—The best pale lilac or lavender.

**Charles Baltet (Double).**—Long trusses; double; beautiful rosy lilac or purple.

**LABURNUM (D) — Golden Chain.**—Small growing tree with long drooping racemes of fragrant yellow flowers in June; very attractive. Each, 3 to 4 ft., 60c; 4 to 6 ft., 75c; 6 to 8 ft., \$1.00.

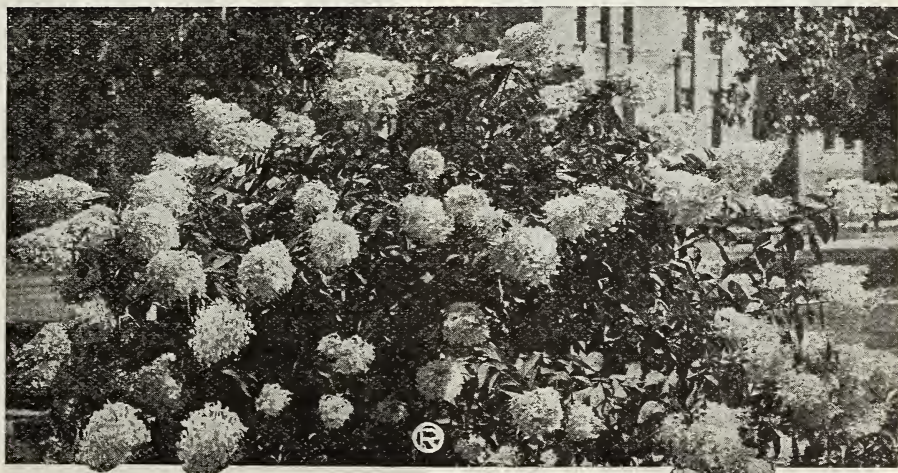
Lakeview, Oregon, Aug. 31, 1918.

Routledge Seed & Floral Co.,

Gentlemen: I have some lovely *Gladiolus*—those which you sent me this Spring.

MRS. GILBERT D. BROWN.

Plant some among your shrubs. See page 88.

**Hydrangea Paniculata Grandiflora**

**NOTE.**—"D" stands for Deciduous plants that drop their leaves in the fall. "E" for Evergreens that retain their foliage all year.



## Hardy Flowering Shrubs and Ornamentals—Continued

**MAPLE (D)**—*Acer Japonica*—Japanese.—  
A beautiful class of low-growing, shrub-like trees, having brilliant colored leaves, which retain their brightness from spring until fall. (No imports this year.) Red, palmate leaves, 2 to 3 feet, \$1.00; 3 to 4 ft., \$1.50.

**PHILADELPHUS (D)**—Mock Orange.—The flowers are sweet scented, milk-white and bloom from May to July. We have five choice varieties. Each 50c and 75c.

**QUINCE (D)**—*Cydonia Japonica*—Bright scarlet single, flowers very early in the Spring, before the leaves appear. Thorny, compact growth. One of our best hardy shrubs.  
Each 50c to 75c



Single Lilac  
(Marie Le Gray)

Lilac, see page 101

**DON'T FORGET** to order some Gladioli Bulbs. They multiply from year to year. See page 88.

### PRUNUS

**Pissardi.**—The purple leaved plum of Japan, growing into a shapely small tree of much merit, covered in the spring with clouds of white flowers, followed by leaves which turn a beautiful bronzy purple color, remaining beautiful a long time. Each 75c to \$1.00; extra select \$1.50

**SPIREAS (D).**—Graceful shrubs, everyone should plant. They are of the easiest culture, and very desirable in collections. All the Spireas bloom with a riotous extravagance which makes them quite striking. Their individual style, color and habits of growth differ so markedly, that a collection of varieties will ensure bloom the entire season.



Double Lilac, Mad. C. Perier, page 101

**Anthony Waterer (Bumalda).**—Covered nearly the whole growing season with large umbels of deep crimson flowers.  
Small, 50c; Large, 60c to 75c

**Van Houttei. (Bridal Wreath).**—The grandest of all the Spireas. It is a beautiful ornament for the lawn at any season, but when in flower it is a complete fountain of white bloom, the foliage hardly showing; perfectly hardy and an early bloomer. (See cut.)  
Small plants, 50c; Large, 60 to 75c

**Thunbergii.**—Of graceful habit; the branches are slender and somewhat drooping; foliage in autumn changes to bright red and orange; flowers in feathery masses, white, appearing early.  
Small plants, 50c; Large, 75c to \$1.00



Spirea Van Houtte.

**DON'T** Be misled by the fine catalogs with little prices sent out from the East. Buy our field grown plant, much larger and better than the weakly Eastern stock.





Viburnum Plicatum—Japanese Snowball

**SNOWBALL (D)—Viburnum.**

**Sterilis (Common Snowball).**—Blooms in latter part of May. Flowers pure white, large balls. Every one should plant a Snowball. Small plants 50c. 3 to 4 ft. each 60c to 75c; extra choice 5 to 6 ft. plants, \$1.00 to \$1.25.

**Plicatum (Japanese Snowball).**—One of the most charming hardy flowering shrubs in existence; bears great wreaths and clusters of pure white globular masses of flowers; covered with bloom for weeks in the spring; grows 4 to 6 feet high; entirely hardy. 2 ft., 60c to 75c; 2 to 3 ft., \$1.00.

**TAMARIX**

**Africana.**—A tall slender growing shrub with fine feathery foliage on long graceful branches covered in the early summer with delicate pink flowers; a graceful and beautiful shrub. 2 to 3 feet, 60c to 75c; large, \$1.50.

**WEIGELA (D) — (Diervilla).**—Beautiful shrubs that bloom in May, June and July. The beautiful trumpet-shaped flowers are produced in so great profusion as to almost entirely hide the foliage. They are very desirable for the border or grouping, and as specimen plants.

**Prices:** Following kinds, Each 50c to 75c.

**Candida.**—Beautiful white flowers; a continuous and profuse bloomer; very hardy.

**Rosea V.**—Lovely, large, rose-colored flowers, borne in such profusion that the whole bush appears a mass of rosy bloom.

Routledge Seed & Floral Co.,

Gentlemen: Received the Trees in good condition and planted them the same day. They are all splendid stock.

Thanks for the Rose Bushes. We have very open weather here; no snow yet.

Will want something in the future. Wishing you every success the New Year,

Yours truly,

WM. HODGKINSON.

**SYMPHORICARPUS (D).**—Highly valued for use in densely shaded situations where little else will grow, and for the striking beauty of their bright, persistent fruits which hang all winter. 3 to 5 feet. White or Red, 2 to 4 ft., each 60c to 75c.

**SUMAC (D).**

**Cut-Leaved (Rhus Glabra Laciniata).**—A beautiful shrub, with large leaves, deeply and finely cut, and drooping graceful habit. Leaves assume a gorgeous crimson color in autumn. Each 3 to 4 ft. \$1.00



Weigela (Flowers one-half Size)

Always remove the packing and moss from the trees before planting. Never put manure so as to come in contact with the roots of any plant or tree. Use only good soil on and around the roots.



## Evergreen Shrubs and Trees

In moving evergreens, they are generally taken up with a ball of earth about the roots; this makes it necessary to ship them by express or freight only. The stock we offer has been moved in the nursery every two years. This insures their living, and they are worth double the ordinary stock. **NOTE.**—Add 20% to the prices for packing and shipping charges.

### ACUBA (E).

**Japonica.**—Beautiful broad leaved evergreen. Each 75c to \$1.50  
**Variegated.**—With leaves speckled and striped golden yellow. Each \$1.50 to \$2.00

### ARBOR VITAE (E) (Thuya).

**American.**—A most valuable upright evergreen of dense, compact habit.

1½ ft., \$1.50; 2 to 3 ft., \$2.00 to \$3.00

**Golden.**—An attractive, hardy, compact evergreen of a beautiful golden yellow.  
 2 to 3 ft., \$2.00 to \$3.00

**Pyramidal.** 2 to 3 ft., \$1.50  
**Oriental** 2 to 3 ft., \$1.50

### ARAUCARIA, IMBRICATA (E).

**Chile Pine, or Monkey Tree.**—Very rare and beautiful; pointed, needle-like leaves.  
 3 ft. up, specimens \$3.00 to \$5.00

### AZALEA (E).

**A. Crimson.**—A Hardy evergreen species. These are dwarf, compact growers. Foliage small; flowers dazzling crimson.  
 Each \$1.50 to \$2.00

**BOXWOOD (E)—Buxus.**—A compact, small leaved evergreen that can be trimmed into balls, box or pyramidal shape.

**Dwarf, Common.**—Fine for borders, edgings or low hedges. 6 in., each 20c; per 100, \$17.50; specimen plants shaped, 1 ft up, 75c to \$1.50.

**Pyramids.**—2 ft. and up, each \$3.00 to \$5.00.

**CAMELLIA (E).**—Beautiful for the house or garden; evergreen foliage; wax-like flowers.

**Japonica, Double White, Pink or Red.**

Each, 2 feet, \$2.50 to \$3.00; extra select, 3 to 4 feet, \$4.00 to \$5.00.

### CEDAR (E)—Cedrus.

**Atlantica.**—One of the most beautiful evergreens. Upright growth, but low-branched and of compact habit. Foliage light green. 3 to 4 ft., \$2.50 to \$3.00.

**Deodora (Deodar or Indian Cedar).**—Of vigorous growth; pyramidal form; graceful foliage of a light, silvery or glaucous green. Each, 3 ft., \$2.50 to \$3.00.

### CYPRESS (E).

**Lawson's.**—Hardy, graceful, rapid growing evergreen with feathery bluish green foliage. 2 to 3 ft., 75c to \$1.00; 3 to 6 ft., \$1.50 to \$7.50.

**Blue or Golden.**—2 to 3 ft., \$1.50 to \$3.00.

**DAPHNE (E).**—Superb evergreen shrub of compact growth; very fragrant white flowers; very scarce this year.

Each \$2.00

**HOLLY (E)—Ilex.**—Very popular everywhere.

**English (Aquifolia).**—Budded stock, guaranteed berry-bearing. Well balled and carefully packed.

Each, 1½ to 2 ft. \$2.00; 2½ to 3 ft. \$2.50 to \$3.00; specimen plants, 4 to 5 ft. \$5.00 to \$7.50.

**JUNIPER (E).**—Very desirable evergreens for the lawn; generally grown in pyramidal form; foliage fine and beautiful.

**Irish, Swedish and English.**—1½ to 3 ft., \$1.00 to \$2.00; specimens, \$2.50 to \$4.00.

**Communis P.**—Low, graceful, spreading branches; almost of trailing nature; very handsome. 3 to 4 ft. spread, \$3.00 to \$5.00 each.

### LAUREL (E).

**English.**—A small tree, or bush, with handsome shining thick foliage. Excellent for large hedges or screens or as single specimens. 18 to 24 inch, each 60c to 75c; 2 to 3 ft., 75c to \$1.00; specimens, 4 to 6 ft., \$3.00 to \$5.00.

**LAURUSTINUS (E).**—Beautiful evergreen shrub with bright shining green leaves and covered in the late fall, winter and early spring with large panicles of fragrant white blossoms. 1 to 1½ ft., 60c to 75c; 2 ft., \$1.00 to \$1.25.

### MAGNOLIA (E).

**Grandiflora.**—A magnificent evergreen with large, leathery green leaves, more than a foot long; bears large, fragrant white flowers. 3 ft., \$2.50; 4 to 5 ft., \$3.00; 6 ft., \$5.00.

**MAHONIA AQUILIFOLIA (E)—Oregon Grape.**—Native of Oregon, and our state flower. Very valuable and desirable on account of its beautiful foliage and clusters of yellow flowers in spring, followed by blue-black berries. Choice plants, nursery grown, Each 50c to 75c; large, \$1.00; small, \$4.00 doz.

### PINE (E).

**Australian.**—Robust, hardy, spreading, long, dark green needle-like foliage. 2 to 3 ft., \$1.00 to \$1.25.

**Mugho.**—Dwarf, upright, but spreading habit; its silvery blue foliage makes it very desirable; bushy. 1½ to 3 ft., \$3.00 to \$5.00.



Kosteri Blue Spruce

If there is any information or advice that you wish, we will be glad to serve you to the best of our ability. Twenty years' practical experience on the coast enables us to serve you intelligently.



## Evergreen Shrubs and Trees—Continued

**PRIVET—(Evergreen).**—One of the best hedge plants; has small, pointed, evergreen leaves; grows rapidly and compactly; stands severe pruning, and can be kept in fine shape with little care. **California.**

1-year-old plants, 12 inches up, per 10, 75c; per 50, \$2.25; per 100, \$4.00; 2-year-old plants, 24 inches up, per 10, \$1.00; per 50, \$4.00; per 100, \$6.00; 3-year-old, 15c each, \$1.50 doz., \$10.00 per 100.

### RETINOSPORA (E).

One of our most showy and graceful evergreens. There is a large class of Retinosporas, but the most popular are those of compact, tufted character. Choice, well-shaped plants in **Green** or **Golden**. 2 to 3 ft., \$1.50 to \$2.50.

### RHODODENDRONS (E).

Note.—No imports fall of 1918 or spring of 1919. Carried-over stock not salable.

### SPRUCE (E)—Abies.

**Excelsa (Norway Spruce).**—One of our most popular evergreens; dark green. Specimen plants, \$1.50 to \$4.00 each; for hedges, 40c to 60c according to size.

**Kosteri Fungens, Glauca.**—A beautiful variety on account of its magnificent rich, silvery blue color. We offer only the "true blue" imported from Holland. 1½ to 2 ft., \$3.00; 3 to 4 ft., \$4.00 to \$7.50.

**Colorado Blue.**—In color resembles the above, but shows less color. 1½ to 2 ft., \$2.00; 2½ to 3 ft., \$3.00.

### YUCCA (E)—Adam's Needle.

A stately foliage and flowering plant equally imposing in solitary or group plantings, always conspicuous. The broad sword-like foliage is evergreen; while midsummer shows great erect branching stems bearing a showy display of pendant, creamy-white bells.

**Prices:** Small plants, 8 to 10 in., 25c each; 2-year and up 35c to 50c; 18 to 24 in. 75c to \$1.50; specimen plants, \$1.50 to \$2.50.

## Shade Trees—Hardy, Desirable Kinds

The following are our most popular varieties. If you want some other kind, inquire; we, no doubt, can supply.

**NOTE.**—We make a delivery charge in the city, rate on request; also a packing and shipping charge on out-of-town orders as follows: One tree 50c; 6 for \$1.00; 12 for \$1.50.

**BIRCH (D)—Betula.**—Remarkable for its elegance; very graceful; silvery bark and slender branches.

**European White.**—6 to 8 ft., each 75c; 8 to 10 ft., each \$1.00 to \$1.50.

**Weeping Cut-Leaved (alba lancinata pendula).**—Charming tree; gracefully drooping branches, silvery white bark and delicately cut foliage present a combination of attractive characteristics rarely met with in one tree. 8 to 10 ft., \$1.50 to \$2.50.

**CATALPA (D).**—A beautiful shade tree. White flowers in July.

**Speciosa.**—6 to 8 ft., each 75c; 7 to 9 ft. \$1.00 to \$1.25.

**CHESTNUT (D).**—Very popular, stately shade trees. Extensively planted for shade.

**American Sweet.**—6 to 8 ft., each \$1.00 to \$1.50.

**Horse, European, Red Flowering.**—Much slower grower than the white. 6 to 8 ft., \$1.25 to \$1.50.

**Horse, White Flowering.**—6 to 8 ft., \$1.25 to \$1.50.

**DOGWOOD, OREGON.**—4 to 6 ft., each 60c to \$1.00.

**ELM (D).**—One of the most popular and best shade trees. Very desirable for street.

**American White.**—6 to 7 ft., each \$1.00; 8 to 10 ft., \$1.25 to \$1.50.

**Weeping Elm (Camperdown).**—Each \$2.50.

**LINDEN (D)—American.**—Very desirable and beautiful trees for park or street planting; large heart-shaped leaves, white flowers; rapid growers. 6 to 8 ft., each \$1.00; 8 to 9 ft., \$1.25 to \$1.50.

### MAPLE.

**Silver Variegated (A. Negundo Variegatum).**—Most attractive; leaf is variegated white and green 4 to 6 ft., \$1.00; 6 to 8 ft., \$1.50 to \$2.00.

### LARGE GROWING MAPLES FOR SHADE.

**Norway.**—Of large, compact habit; broad, deep green shining foliage, and stout, vigorous growth. 6 to 7 ft., \$1.00; 8 to 9 ft., \$1.25; extra select, \$1.50 to \$2.00.

**Oregon.**—Wide-spreading branches and large foliage; very rapid growth. 5 to 6 ft., each 75c; 7 to 8 ft., \$1.00; 8 to 10 ft., \$1.25 to \$1.50.

**Silver or Soft.**—Native tree of rapid growth; foliage bright green above and silvery white beneath. 6 to 7 ft., each 75c; 8 ft. up, \$1.25.

**Sugar or Hard.**—Of upright habit of growth; dense shade; extensively used. 7 to 8 ft., \$1.25.

**Schwedlerii.**—Excellent variety, pyramidal habit young leaves; shoots in the spring crimson. 10 ft. well branched \$3.00 each.

**Leopold.**—Similar to above except the leaves in the fall are red and scarlet; very attractive. 10 ft., well branched, \$3.00.

**MOUNTAIN ASH (D).**—Very ornamental trees, especially when covered with its clusters of red berries in the fall. 6 to 8 ft., \$1.00.

**POPLAR (D).**—These well known trees are planted largely for windbreaks and ornamental purposes; very rapid growers.

**Carolina.**—Pyramidal; **Lombardy.**—Tall and spiral. 6 to 8 ft., 60c.

**TULIP TREE (D).**—A rapid-growing tree, with rich, glossy foliage; flowers tulip-shape, greenish yellow; a fine shade tree. 6 to 7 ft., \$1.00; 8 to 9 ft., \$1.50.

### WILLOW (D)—Salix.

**Babylonica (Babylonian or Weeping Willow).**—Foliage is bright green and has a wavy appearance. A well known and graceful variety. 6 to 8 ft., \$1.00.

**WALNUTS.**—See page 106.



## Raise English Walnuts

We can successfully raise English Walnuts here in the Pacific Northwest, and the quality of the nuts is superior to most other sections. Plant a tree or two, at least, for your own use and, if you have a large place, plant more. While the cost of grafted stock is more, we advise you to plant them, as there is "no chance" as to quality of the nuts.

**WALNUTS (D). Grafted Stock.**—This year we are prepared to supply you with **Oregon** grown trees that are extra select and **ESPECIALLY FINE ROOTED**, much superior to the California trees on account of the fine growth of strong fibrous roots. The stock we offer is **Voorman's famous Franquette** grafted on California black walnuts roots. **Prices:** 4 to 6 ft. each \$1.50; per 10, \$12.50; 6 to 7 ft. each \$1.75; per 10, \$15.00. Extra select, 8 to 9 ft., \$2.00 to \$2.50. Special prices in large quantities. Write.

**English.**—Nut-bearing, second-generation stock, not grafted. **Prices:** Each, 2 to 3 ft., 50c; 6 to 8 ft., \$1.25.

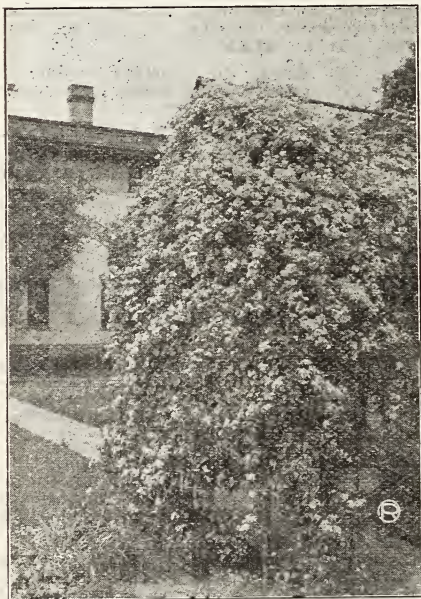
## Beautiful Hardy Climbing Vines

### AMPELOPSIS

**Veitchi (Boston Ivy, or Japan Ivy).**—The most popular and desirable climbing plant for covering brick, stone or cement walls, etc.; when it becomes established at the root it is of very rapid growth and clings to the smoothest surface. The foliage is of a rich olive green during the summer, changing to various shades of bright crimson and scarlet in the fall. In planting cut back to within 6 inches of the ground, so that the new growth may cling to the wall from the bottom up.

Strong plants 35c; extra strong 50c  
**Quinquifolia (Virginia Creeper, or American Ivy).**—This well-known climber is one of the best and quickest growing varieties for covering trees, trellises, arbors, etc.; its large, deep green foliage assumes brilliant shades of yellow, crimson and scarlet in the fall.

Strong plants, 35c; extra strong 50c



**Clematis Paniculata.**

### Small Flowered Clematis

#### AKEBIA

**Quinata.**—Hardy fast growing Japanese vine with handsome foliage and producing flowers in large clusters of chocolate purple color, possessing sweet perfume. Fine for trellises and verandas. **50c each.**

#### JASMINE

Graceful, pretty flowers with fine foliage, clean, neat, attractive and hardy.  
**Each 75c**

#### KUDZU VINE

**Thunbergiana.**—Foliage large, affording dense shade. Bears small racemes of rosy purple blossoms in August. The most remarkable rapid growing vine in existence and unparalleled for ornament and shade. Exceedingly valuable for covering arbors, verandas and pillars.  
**Each 40c**

#### IVY EVERGREEN

**Common English.**—Thick, leathery, evergreen leaves; strong grower.

Good roots, each 25c; large 50c

**CLEMATIS (Virgin's Bower).**—No hardy flowering climbing vine excels in beauty and effectiveness the finer sorts of Clematis. As a climber for the veranda, a screen for fences, for pillars along the garden walks, for training on walls or arbors or in masses on rockwork, it has no rival among strong growing blossoming plants. The Clematis should be grown in rich, deep, sandy loam and well mulched with rotten manure in winter. The richest sheets of bloom and largest flowers are obtained where it has partial shade and a liberal supply of water at the roots.

**Paniculata (New Sweet-Scented Japan Clematis.)**—Of very rapid growth quickly covering trellises and arbors with handsome, clean, glossy, green foliage. The flowers are of small size, pure white, borne in profusion in September and October, and of a most delicious and penetrating fragrance. Choice plants 35c; large 2 to 3-year-old plants 50c to 75c each.

**C. Montana.**—A hardy rapid grower, flowers snow white, fragrant and as the flowers are produced in May and June, it makes it most desirable. Plant it with Paniculata; let them intertwine and get a double blooming period.

Strong plants 75c

**Important.**—When planting Clematis and other vines be sure you spread out the mat of fine roots so that the soil comes in contact with all of them, otherwise they will dry out and die. Be very careful with Clematis especially. Use "Wonder" and "C-M," pages 38-39.



## Hardy Climbing Vines—Continued

### CLEMATIS—Continued—Large Flowering

These bear large and beautiful flowers of various shades of color through the latter part of the summer and early fall. The following varieties are the very best and our plants are all two years old.

Your choice of the following strong field grown roots, 75c each; 3 for \$2.00; postpaid.

**Ramona.**—The best light blue or lavender.

**Ville de Lyon.**—The best bright red; equal to Jackmanii in size.

**Henryi.**—Fine large creamy white flowers. A fine strong grower.

**Jackmanii.**—Intense violet purple; most popular variety.

**Duchess of Edinburgh.**—A free flowering double white variety; very fragrant.

**CAUTION.**—In planting Clematis dig a large hole and spread the roots out very carefully and cover crown of plant about four inches. Keep watered if set close to a dry wall.

### HONEYSUCKLE

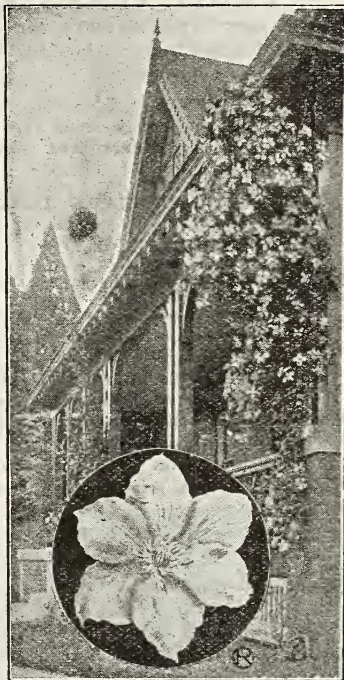
A beautiful climber, rapid grower and very desirable; flowers very fragrant, and produced in great profusion.

Your choice of the following, 50c each; extra strong 60c to 75c.

**Halleana.**—Very popular; almost evergreen; profuse bloomer; flowers white, passing to yellow.

**Belgica (Monthly Fragrant).**—Flowers are large; color red and yellow.

**Sempervirens (Scarlet Trumpet Honeysuckle).**—Flowers of a bright scarlet.



Clematis Jackmanii Vine and Single Flower,  
1/4 Size

### TRUMPET VINE—Bignonia

For covering unsightly places trellises, rockwork or wherever a showy-flowering vine is desired, the Bignonias will be found very useful. The flowers are large, attractive and borne profusely when the plants attain a fair size.

Strong plants, each 50c to 75c

### WISTARIA

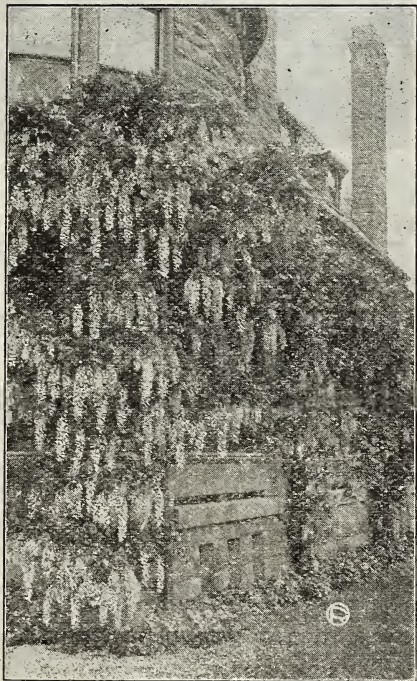
A rapid, hardy climber that will grow to a height of 50 feet or more. The fine foliage and flowers are produced early in the season and come in magnificent clusters. One of the most desirable and showy climbers we know of. (Stock limited. No importations this year.)

**Sinensis.**—Lovely panicles of flowers, produced in the most wonderful profusion. **WHITE OR BLUE**, strong, 2-year vines 75c; extra heavy, \$1.50 each.

**Multijuga.**—This valuable new Wistaria was introduced from Japan and produces magnificent racemes of lovely flowers, often measuring 18 to 24 inches in length.

**WHITE OR BLUE**—grafted stock, \$1.50 to \$2.00.

**Note**—We have a limited number of extra large specimens 5 years old at \$5.00 each



Wistaria Vine in Bloom

"MAKE 'EM HOP."—If you will mix a cup full of Wonder Fertilizer with 5 lbs. "C-M" and work both thoroughly into the soil around your climbers you will get wonderful growth and lovely flowers. See pages 38-39.



## FRUIT TREES, BUSHES, VINES AND PLANTS

**OUR SHIPPING SEASON** for the above is from October 15 to May 1. Some seasons June 1, although it is too late for best results. We advise late fall or early spring planting while stock is dormant.

**HOW WE SHIP.**—Unless otherwise instructed we ship by express or freight, whichever is cheapest. In extreme cases and when necessary, 1-year fruit tree, 3 to 4 ft. only, can go by parcel post at an increased cost of 25% on dozen prices, or 15c each on single trees, to cover postage and careful packing.

**CARE OF STOCK UPON ARRIVAL.**—If you are not ready to plant, dig a trench and "heel" in. If ground is frozen put in a cellar and keep roots damp.

**NO STOCK SENT C. O. D.**

### SUBSTITUTION

If the varieties of the tree ordered cannot be supplied or bought locally, others equally as good and correctly labeled will be substituted, unless otherwise ordered.

**Other Varieties.**—On this and the following pages you will note that we give full description of only a few varieties under each heading. These, we believe, are the best for general or home planting, and you will not miss it by selecting them. We, however, will try and secure for you any variety grown in the West.

## APPLES

Unless otherwise priced	Each	Doz.
One year old, 3 to 4 feet.....	\$ .25	\$2.50
One year old, 4 to 6 feet.....	.30	3.00
Two year old, branched.....	.40	4.00
Selected, 2 to 3 year.....	.50 to 5.00	

Write for our low price by 100 or 1000.

### SUMMER VARIETIES.

**RED ASTRACHAN.** Medium, deep crimson, flesh white, moderately juicy, with an agreeable rich acid flavor; very productive.

**YELLOW TRANSPARENT.** Medium size, roundish, slightly conical; skin pale yellow, flesh tender, juicy, sub-acid; good.

### AUTUMN VARIETIES.

**\*GRAVENSTEIN.** Large, beautiful yellow, dashed with deep red and orange; tender and crisp, with a highly aromatic flavor; tree very vigorous; very popular sort.

**KING OF TOMKINS COUNTY.** Very large, globular; yellowish, shaded with red; flesh yellowish, rather coarse, juicy, rich flavor.

**WEALTHY.** Medium, whitish yellow, shaded with deep red; flesh white, tender and juicy.

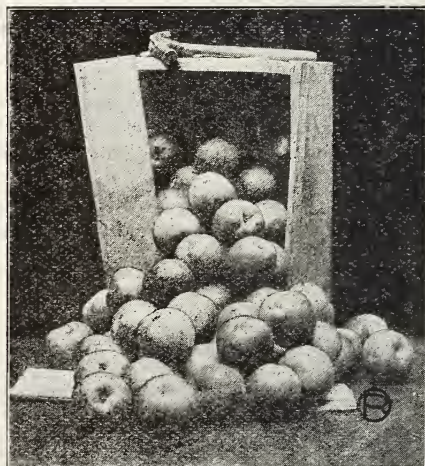
### WINTER VARIETIES

**\*BALDWIN.** Large, rounded; deep, bright red; very productive; one of the best and most popular winter apples.

**DELICIOUS.** A splendid apple; coming into prominence rapidly. Tree vigorous and hardy and the fruit equals the name in every respect. Fine for market and home use; late; keeps till April.

**NORTHERN SPY.** Large, round, greenish-yellow, stripes of purplish red; flesh white, juicy, brisk sub-acid; valuable for market and cooking.

**ORTLEY (White Bellflower).** Fruit medium to large, yellow; sometimes with a sunny cheek; flesh white, fine-grained, tender, juicy, sub-acid.



### WINTER VARIETIES—Continued.

**SPITZENBERG.** Large, oblong, yellowish ground with broken stripes of bright red; flesh yellow, juicy with a delicious rich flavor.

**WINTER BANANA.** Winter; yellow; bluish cheek; sub-acid; medium size; a good keeper; a handsome apple; fine flavor, tender and delicious.

**YELLOW NEWTOWN PIPPIN.** Large, skin smooth, golden yellow; flesh firm, crisp, juicy; one of the standard varieties.

**ARKANSAS BLACK.** Dark maroon; long keeper; flesh firm, fine grained and juicy.

**GRIMES' GOLDEN.** Of the highest quality; large, yellow; very productive.

**JONATHAN.** Yellow, covered with red; of excellent quality and heavy cropper.

**RHODE ISLAND GREENING.** Greenish yellow; large; very rich flavor.

**ROME BEAUTY.** Large, yellow, shaded bright red; juicy sub-acid, good bearer.

**WINESAP.** Medium size, deep red; firm, crisp and excellent; widely cultivated.



## CRAB APPLES

Prices the same as Apples

**TRANSCENDENT.**—Fruit very large, skin yellow, striped with red; the best of its class for cider.

**Yellow Siberian.**—Fruit small, golden yellow.

**FLORENCE.**—Size medium, red striped, early bearer; bearing full crop each year; tree immensely productive; juicy and crisp.

**Elysop.**—Large, dark crimson; popular.

## APRICOTS

Unless otherwise priced	Each	Doz.
1-year-old, 4 to 6 feet.....	.35	3.50
2-year-old .....	.40	4.00
Selected .....	.50	

**MOORPARK.**—Very large, yellowish-green; brownish red on the sunny side; flesh bright orange; fine for canning and drying; freestone.

**LEWIS.**—One of the largest apricots known; handsome in appearance; flavor excellent. If you have room for only one apricot tree, plant the Lewis.

Price, 1-year 60c; 2-year 75c

**Royal.**—Above medium size; sweet, rich and juicy.

**Tilton.**—Large, rich color, high flavor; very productive.

Culdesac, Idaho, March 21, 1918.

Routledge Seed & Floral Co.,  
Gentlemen: We were well pleased with the order of trees sent first of month. Especially grateful for the extra. A friend of ours would like one of your catalogues.

P. D. ADKINSON.

Hermiston, Oregon, March 20, 1918.

Routledge Seed & Floral Co.,  
Gentlemen: The Trees and Plants arrived all o. k. Well pleased with them.

LULU M. RHODES.

## CHERRIES

Unless otherwise priced	Each	Doz.
1-year-old, 3 to 4 feet.....	\$0.40	\$4.00
1-year-old, 4 to 6 feet.....	.50	5.00
2-year-old, branched .....	.60	6.00
Selected, 2 to 3 year.....	.75	1.00

Write for our low prices by 100 or 1000.

**NEW-ABUNDANCE** (Burbank production).

—A seedling of Royal Ann, larger, handsomer, sweeter and more delicious than this great favorite; ripens a week later.

Price, each, 1 year 4 to 6 ft., \$1.00

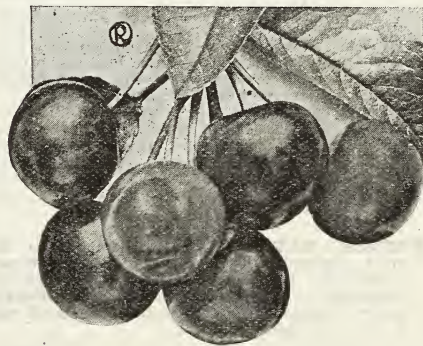
**BING.**—Originated in Oregon; fruit large, dark brown or black; very fine; late; a good shipping variety.

**KENTISH** (Early Richmond).—Light red, juicy; one of the best acid cherries and unsurpassed for cooking purposes; very productive.

**LAMBERT.**—Fruit of largest size and of fine quality; color deep, rich red; flesh firm and of fine flavor; a fine market variety; ripens two weeks later than Royal Ann.

**NEW-THE "BUREBANK."**—A rich, fine flavored dark red cherry, sweeter than other early varieties; a good shipper, vigorous grower and never failing producer.

Price, 1 year 4 to 6 ft., select trees, each \$1.00.



**LATE DUKE.**—Large, light red; late and excellent; sub-acid.

**MAY DUKE.**—Large, rich, dark red; flesh tender, juicy, and sub-acid; an excellent variety, and one of the earliest of its class.

**ROYAL ANN** (Napoleon Bigarreau).—A magnificent cherry of the largest size; pale yellow, becoming amber in the shade; richly dotted and spotted with deep red, and with a bright red cheek; flesh very firm, juicy and sweet; tree a rapid grower and immense bearer.

## QUINCE

1-year-old .....	Each 40c to 50c
2-year-old, branched .....	.60c
Extra Select .....	.75c

**CHAMPION.**—Large, yellow; flesh cooks very tender; flavor is most delicious; more productive than the orange, ripening two weeks later.

**PINEAPPLE.**—The fruit in form and size resembles the Orange Quince, but is smoother and more globular. Makes a superior jelly. Can be eaten raw, and is said to cook as tender in five minutes as the best cooking apple, possessing a most exquisite and delicious flavor, not equaled by any other quince. September.

**RAISE CLEAN, PERFECT FRUIT BY SPRAYING**—Don't let the bugs get started. **SPRAY EARLY.** We offer you a complete line of insecticides and sprayers at low prices, pages 124 to 128.



## PEARS

Unless otherwise priced	Each	Doz.
One year old, 3 to 4 feet.....	\$.35	\$3.50
One year old, 4 to 6 feet.....	.40	4.00
Two year, branched .....	.60	5.50
Selected two year .....	.75	

### SUMMER VARIETIES

**BARTLETT.**—Large, skin thin, clear, lemon yellow, with soft blush on the sunny side; flesh white, buttery, very juicy and highly flavored; the best summer pear in existence.

**BEURRE BOSC.**—Handsome deep yellow, slightly russet; high quality, tender, aromatic. September.

**SECKEL.**—Rich and highly flavored; its highly concentrated, spicy, honey flavor is unequaled; skin brownish green, russet brown cheek; flesh whitish, buttery and melting.

### AUTUMN AND WINTER VARIETIES

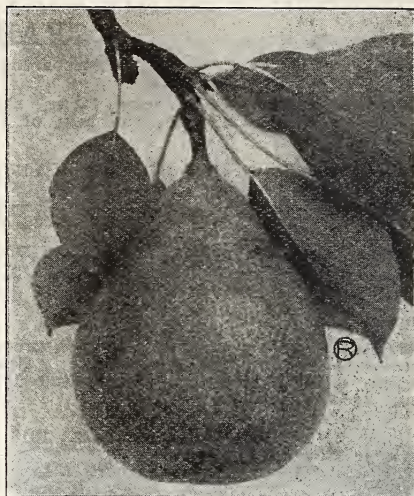
**BEURRE CLAIRGEAU.**—Large, yellow, shaded with orange and crimson; covered with russet dots; flesh yellowish, buttery, juicy; October-November.

**BEURRE D'ANJOU.**—A large, fine pear, buttery and melting, with sprightly, vinous flavor; tree a fine grower and good bearer; one of the very best; October-January.

**COMICE.**—A splendid commercial variety, being of fine size; good appearance; ships well; yellow, faintly blushed crimson.

**FALL BUTTER.**—Favorite fall pear; yellow, smooth and juicy; September.

**WINTER BARTLETT.**—Originated in Eugene, Oregon. Fruit large, closely resembling the famous Bartlett in shape and appearance, but ripening considerably later; tender, juicy and melting and with a most pleasing flavor.



Bartlett.

**FLEMISH BEAUTY.**—Large, juicy, rich, very hardy, productive and profitable. September-October.

**WINTER NELLIS.**—Medium; skin yellowish green, dotted with gray russet; flesh yellowish white; fine grained and abounding with juice of a rich saccharine, aromatic flavor; especially adapted to this valley, producing large crops every year; an excellent shipper and good keeper; November-December.

## PRUNES

Unless otherwise priced	Each	Doz.
1 year old, 3 to 4 feet.....	\$.30	\$3.00
1 year old, 4 to 6 feet.....	.35	3.50
2 year old, branched.....	.40	4.00
Selected 2 year old .....	50c to 60c	

Write for our low prices by 100 or 1000.

**GIANT.**—New; of immense size, dark crimson on yellow ground; good yielder; flesh firm, rich, sweet, delicious; good shipper.

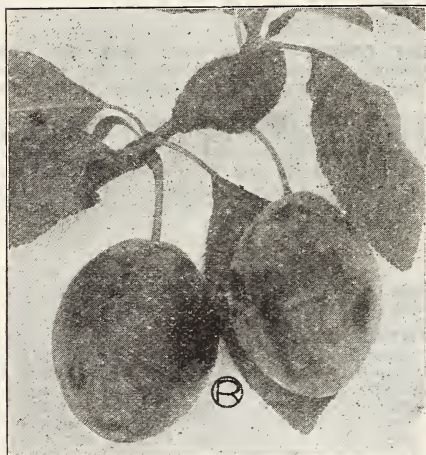
**HUNGARIAN.**—Very large, dark red; juicy and sweet.

**ITALIAN (Fallenberg).**—Medium, oval, tapering at both ends; dark purple; flesh greenish yellow; separates freely from the stone; best for drying.

**PETITE (French).**—Small size, egg-shaped; violet purple; sweet, rich and sugary; very productive; standard for drying.

**SILVER.**—Seedling of the Coe's Golden Drop; excellent for drying or canning. September.

**SUGAR.**—Tree vigorous grower; early bearer; fruit ripens earlier than the French; is four times as large and dries in half the time; flesh tender and rich in sugar; color dark purple; August.



Italian.

**SPRAY PUMPS**—We carry in stock a complete and up-to-date line of hand, bucket and barrel spray pumps—see pages 126 to 128.



## PEACHES

Unless otherwise priced	Each	Doz.
1 year old, 3 to 4 feet.....	\$ .30	\$3.00
1 year old, 4 to 6 feet.....	.35	3.50
2 year old, branched.....	.40	4.00
Selected 2 year old .....	.50	

Write for our low prices by 100 or 1000.

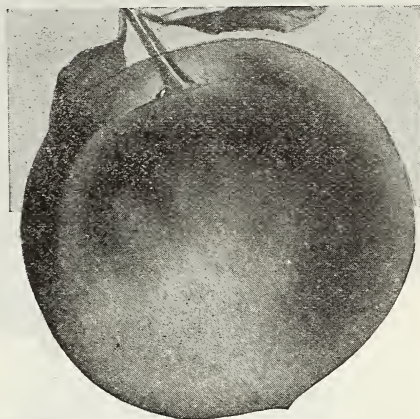
**EARLY CRAWFORD.**—Very large, yellow; with red cheek; flesh sweet and excellent; our most popular peach for table and canning; freestone.

**EARLY ALEXANDER.**—One of the largest and best of the extra early varieties; almost free-stone; tree bears young.

**ALBERTA.**—Very large, bright yellow, red cheek; flesh yellow, juicy, sweet; regular bearer; fruit very showy and perfect; freestone; early.

**EARLY CHARLOTTE.**—An improved seedling from Early Crawford, originated at Salem, Ore. This remarkable peach succeeds in Oregon, where many other varieties fail. Flesh yellow, melting and juicy, with a rich and excellent flavor; freestone; ripens ten days after Crawford's Early.

**LATE CRAWFORD.**—Very large, roundish; yellow, with dark red cheeks; flesh deep yellow, juicy and melting; flavor rich and excellent; very popular; valuable for canning and drying; freestone; September.



**HALE'S EARLY.**—Skin greenish white, red cheek, flesh white; juicy and sweet; semi-freestone; very early and good.

**MUE.**—Large, pale yellow, very firm and sweet; best for drying; freestone; August.

**SALWAY.**—Creamy yellow, red cheek; flesh deep yellow, red at the pit; rich and sweet; a standard late peach; freestone.

## PLUMS

Unless otherwise priced	Each	Doz.
One year old, 3 to 4 feet.....	\$ .25	\$2.50
One year old, 4 to 6 feet.....	.35	3.50
Two year old, branched .....	.50	5.00
Selected, 2 to 3 years .....	.60	

Write for our low prices by 100 or 1000.

**BURBANK.**—Largest and handsomest of the new plums; perfectly hardy, free from disease; juicy, tender and sweet; ripens early July; as fine eating as a peach; freestone; should be in every collection.

**COLUMBIA (Shippers' Pride).**—Largest size, nearly globular; brownish purple; rich, sugary, freestone; August.

**GREEN GAGE.**—Small, round; flesh pale green, melting and juicy; freestone; August.

**PEACH.**—Very large; skin brownish-red, slightly coarse-grained, but juicy; freestone; very popular as a home and market variety; August.

**DAMSON.** Small, oval; skin purple; flesh melting, rather tart; September

**YELLOW EGG.** Very large, skin of a deep golden color, but rather acid; excellent for cooking; very showy; August.

**MAYNARD.**—Originated by Luther Burbank. Very large, nearly round, flattened at ends. Of richest crimson-purple, deepening to royal damask. Tree hardy, vigorous and compact grower; bears immense crops while very young; never falls; flesh firm, even when dead ripe, but melting and juicy with a deliciousness indescribable; July.  
Price 75c; selected, \$1.00

**SATSUMA (Blood Plum).** Japanese variety. Quite popular, large dark red from skin to pit, which is small, firm and juicy; tree productive. Early July.

## NECTARINES

Prices—4 to 6 feet, each 40c; doz., \$4.00.

**BOSTON.**—Large, deep yellow bright blush; flesh yellow; very rich and luscious. Best for Oregon; August.

**EARLY VIOLET.**—Medium; skin pale, shaded violet; flesh white; good; July.

## ALMONDS

Almonds can be grown successfully in most sections of Oregon and Washington, and are attracting much attention from commercial orchardists. Select Trees, 4 to 5 feet, each 40c; doz. \$4.00.

**I. X. L.** A vigorous grower and sure cropper, producing nuts of large size and handsome appearance; shell thin; most popular.

**SAVE SUGAR AND GLASS JARS**—Make money by drying your surplus fruit and vegetables in a "HOME" EVAPORATOR. See page 123.



**Oregon Champion****GOOSEBERRIES**

Unless otherwise priced	Each	12	100
1 year old .....	\$ .15	\$1.25	\$8.00
2 year old .....	.20	2.00	10.00
Extra Selected .....	.30	3.00	.....

Write for our low price per 1000.

**OREGON CHAMPION.**—Berries large, round and pale green; fine for table use and pies; hardy, strong, and a very prolific bearer; most popular and best commercial variety. Low prices by the thousand. Write.

**DOWNING.**—Large, light green; soft, juicy and good. Vigorous and very productive.

**RED JACKET (Josselyn).**—Of large size, smooth, prolific and hardy; of best quality; a wonderful cropper, with bright, clean, healthy foliage.

Prices: 1-year each 20c; per doz. \$2.00  
2-year each 25c; per doz. \$2.50

**INDUSTRY.**—English variety; large oval; dark, red, rich and agreeable; vigorous and productive.

Prices: 1-year each 20c; per doz. \$2.00  
2-year each 25c; per doz. \$2.50

BY PARCEL POST—Gooseberries and Currants; add 10c per bush, 50c per doz., to cover postage and careful packing.

**CURRENTS**

Low prices by the thousand.

Unless otherwise priced	Each	12	100
One year old .....	\$ .15	\$1.50	\$8.00
Two year old .....	.20	2.00	10.00
Extra large selected bushes .....	.25	2.50	....

**BLACK NAPLES.**—Very large, black; valuable for jams and jellies.

**CHERRY.**—Large, deep red; rather acid; fine for preserving; valuable market variety.

**FAY'S PROLIFIC.**—A new Currant, larger than the Cherry; has less acid, and is more prolific.

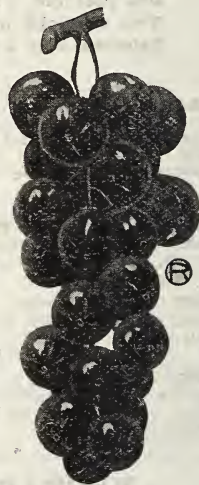
**WHITE GRAPE.**—Large, yellowish-white, valuable for the table; the finest of the white sorts.

**PERFECTION.**—New; a late introduction of great merit. Our grower says: "You cannot say too much about the good qualities of this grand new sort." So, whether you plant ten or a hundred, plant a good proportion of Perfections, which is the largest, most productive, finest-flavored rich, mild, sub-acid; plenty of pulp; few seeds), healthy, bright red currant to date.

1-year, each 20c; per doz. \$2.00; per 100 \$10.00

2-year, each 25c; per doz. \$2.25; per 100 \$15.00

Extra Selected 35c

**FILBERTS**

These nuts do well on this coast. We can supply **Barcelona** and **Du Chilly**, the most popular sorts. 2 to 4 ft., each 50c; doz. \$5.00

**WALNUTS.**—See page 106.

**PERSIMMONS**

These are perfectly hardy and do well here. We can supply the American or larger Japanese varieties. Price, 4 ft., 75c each

**FERTILIZE** the ground and **SPRAY** the fruit if you want a large, profitable, satisfactory crop.



## BLACKBERRIES

Unless otherwise priced      Each      Doz.      100  
 1 year ..... \$ .10      \$1.00      \$6.00  
 Extra Strong ..... .15      1.50      8.00

BY PARCEL POST—Add 10c each, 50c per doz., extra to cover postage and careful packing, if wanted by mail.

**LAWTON.** The favorite market variety; large, good quality, uniform, hangs long on vine when ripe, productive and profitable. The most generally planted for commercial markets in the Pacific Northwest. Oregon's most popular kind.

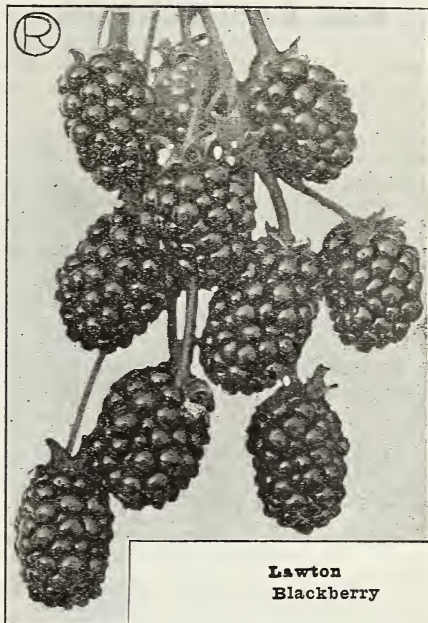
**ELDORADO.** New. Very vigorous and hardy; yield is enormous; berries large, jet black, borne in large clusters, and ripen well together; sweet, melting and pleasing to the taste; no core, and keep eight or ten days after picking with quality unimpaired. Select, price, 25c each; \$2.00 per doz.; \$10.00 per 100; 1 year, each 20c; per doz. \$1.50; 100 \$8.00.

**EVERGREEN.** Introduced from Oregon; beautiful lacinated foliage, which it retains all winter; berries long, black, sweet, rich and delicious; ripens from July to November; a fine berry for family use.

Select, each, 15c; doz. \$1.25; 100 \$10.00

**HIMALAYA GIANT.** A rampant grower of a trailing nature; a heavy cropper; the berries are large, juicy, coreless, sweet and firm, with a delicious aromatic flavor. Its deep-rooting qualities enable it to produce a large, firm berry even in a very dry season.

Select, price 15c each; \$1.25 per doz.; \$8.00 per 100.



Lawton  
Blackberry

### Plant a Few of These Delicious Berries

Trail Them On the Garden Fence or Over a Trellis.

**PRICES**—Your Choice of the following, strong, transplanted 2 year plants 20c each, \$1.75 doz., postpaid; by express or freight, \$1.50 per doz., \$10.00 per 100. Write for special quantity prices. Tips or 1 year roots give poor results—we do not offer them.

### Loganberry

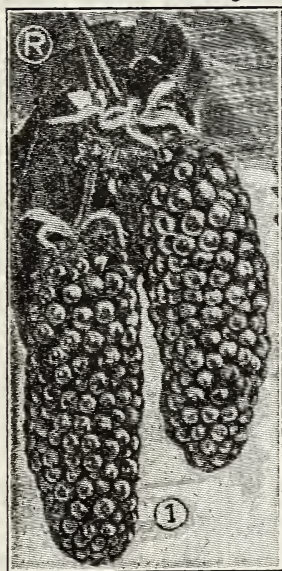
In great demand again for canning and drying. An exceedingly strong grower and an enormous bearer. The fruit is larger and longer than the blackberry and produced in immense clusters; color, dark red. Has a pleasant, vinous flavor, delicious and peculiar to this berry alone; fruit ripens early. It is excellent for the table, eaten raw or stewed, and for jelly or jam is without an equal.

### Burbank's Phenomenal

A most desirable, refreshing berry for the home garden. Of a bright crimson raspberry color; very productive, and most delicious of all berries for pies, canning, jellies or jams. Sweeter than the Loganberry and fine as a fresh table fruit.

### New Mammoth Blackberry

A grand addition to the list of Blackberries. The handsome, large juicy berries are delicious. It is a rampant grower, of trailing habit; enormously productive and early. Fruit is enormous, specimens measuring two and one-half inches long; seeds small, soft and abundant; cores small and soft. In size and flavor it surpasses all other varieties of blackberries. Excellent for home use.



New Mammoth.

## DEWBERRY

**LUCRETIA.**—Fruit ripens between the raspberry and the blackberry. Berries large, handsome, sweet and luscious; trailing vines.

Select, each 15c; per doz. \$1.25; \$7.50 per 100.

**NOTE.**—Our 2-year-old Logan-Phenomenal and Mm. Blackberry plants are transplanted tips grown 1 year in nursery row and all will live. They are cheaper than "tips" at any price. "Tips" will not ship safely.



## RED RASPBERRIES

	Each	12	100
1 year .....	\$ .10	\$1.00	\$7.00
Extra strong .....	.15	1.25	8.00

Very low prices per thousand.

BY PARCEL POST—Add 10c each, 50c a doz., extra to cover packing and postage.

**CUTHBERT.** Berries very large, deep, rich crimson; good for shipping; the most popular of all commercial sorts of raspberries; stands the sun and heat well; flavor rich, sweet and delicious; mid-season. Per 100, \$5.00.

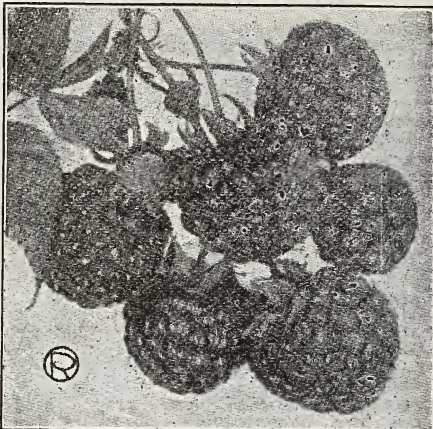
**MARLBORO.** Very large and earlier than Cuthbert; beautiful, bright scarlet; good quality; hardy and productive.

**ST. REGIS (New)**—The St. Regis everbearing red raspberry. The demand is great. It is a very valuable variety. It originated in New Jersey among a colony of Italians who made money by selling the fruit to hotels and restaurants late in the fall after all other kinds of berries were gone. It is a fine berry in every respect, being hardy, very productive, of good color and fine flavor. It produces well in the early season and you get the fall crop extra. We unhesitatingly recommend this variety.

Price, 15c; doz. \$1.25; per 100 \$10.00. Select, extra strong, each 20c; doz. \$1.50.

**Golden Queen.** A handsome yellow fruited raspberry; excellent quality, productive and hardy. Each 15c; doz. \$1.25.

**SUPERLATIVE (New)**—The berry is large and firm, with very small, brittle seeds; color, soft crimson. The healthy, vigorous growth, remarkable productiveness, hardness, immense size, handsome, uniform shape and rich, luscious flavor makes the "Superlative" peerless among raspberries nearly a week earlier than the Cuthbert. Price, each 15c; doz. \$1.25; 100 \$8.00.



## BLACK RASPBERRIES

	Each	12	100
1 year .....	\$ .15	\$1.25	\$10.00
Extra strong .....	.20	1.50	12.00

**GREGG.** For many years the leading standard best known market sort. Very productive, large size, firm, meaty berries, covered with heavy bloom.

**CUMBERLAND.** A healthy, vigorous grower, producing immense crops of magnificent berries. Fruit very large, firm and excellent quality, keeps and ships well. A most profitable market variety; mid-season. Same price as Plum Farmer.

**PLUM FARMER.** Early blackcap and of superior quality; 10 days earlier than Gregg, coming in with the earliest reds. A most desirable and profitable new sort. Extra strong, each 20c; doz. \$1.50; per 100 \$12.00; 1 year, \$10.00.

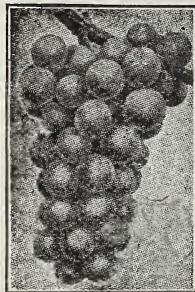
## GRAPES

Unless otherwise priced	Each	12	100
One year old .....	\$ .15	\$1.50	\$10.00
Two year old .....	.20	2.00	12.50
Extra large and strong roots.....	25c to .35		

BY PARCEL POST—Add 10c each, 50c a doz., extra to cover packing and postage.

**CAMPBELL'S EARLY.** Clusters large and handsome; berries large, round, black, with purplish bloom; flesh firm but tender; seeds few; flavor rich, sweet and slightly vinous. A strong and vigorous grower and ripens its fruit early. Berries do not drop from the clusters, and fruit keeps a long time in perfection.

Price: 1 year, 25c each, \$2.50 doz.; 2 years, 35c each, \$3.00 doz.



**CONCORD.** Large, black grape, bunches compact, berries round, sweet and pleasant; very popular.

**DELAWARE.** Best of our native grapes; grows freely and is perfectly hardy; ripens early; berries small, light red.

**MOORE'S EARLY.** Bunch medium; berry large, resembling Concord, but more pulp, and is earlier.

**OTHER GRAPES.**—We list the most popular hardy sorts for general use, but can supply Thompson's Seedless, Flame Tokay, Muscat, etc., at 25c each, \$2.25 doz.

**NIAGARA.** Berry large, pale greenish yellow; flesh tender and sweet; productive; one of the best white grapes.

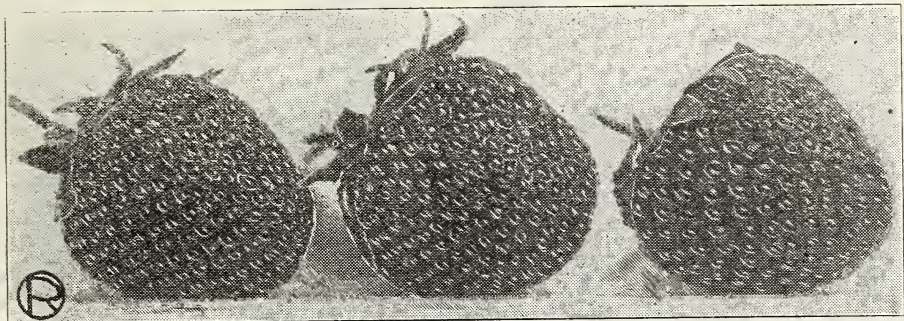
**WORDEN.** Bunch very large and compact; berry large, black; an improved Concord; earlier and excellent home variety.

**QUALITY**—We call your attention to the fact that we are catering to the "Particular Planter," who wants "High Quality," and is willing to pay a price necessary to secure it. Any sensible person knows that "Highest Quality" in stock of any kind is more expensive to produce than common, and therefore is worth more. Our prices are low, quality considered.



**SELECTED  
STRAINS****STRAWBERRY PLANTS****BETTER  
NONE**

Our strawberries are carefully grown trimmed and packed in the best manner to insure their arrival in good, fresh condition. If you want good, strong, healthy, vigorous plants and true to name, send to us. Our prices are right; our plants are O. K.



**"Wellington Marvel," the Latest Strawberry With a Future.  
"Marvel"—A New Strawberry of Great Merit**

**WELLINGTON'S MARVEL** was originated by Wellington S. Butler of Merlin, Ore., a strawberry specialist. We have the exclusive sale of all his plants, and take great pleasure in introducing this really superb and meritorious new variety. In all our experience and observation, we have never seen the equal of the "Marvel" in color, shape, size and quality. The ripe berries command instant attention on account of the bright, fresh, delightful appearance. The commercial grower, who gets a start of this variety and markets the fruit, will reap a rich harvest.

**BEST BY TEST.** If we were to tell you how far ahead, how superior, the "Marvel" is over Clarks, Magoons, Oregon, Gold Dollar and such varieties, you would scarcely believe it. We claim there is no comparison at all. The "Marvel" is in a class by itself, and head and shoulders above all in Beauty, Flavor, and Production. A trial will convince you.

Wellington's Marvel is almost frost-proof. The foliage is heavy and spreading, and each fruit-stalk seems to be perfectly covered and protected.

Let us emphasize the word, "fruit-stalks." These can really be called "fruit-stalks" on the "Marvel" plants, for they are strong and sturdy, producing from 12 to 18 berries. Every plant in Mr. Butler's patch produces from 15 to 20 of these fruit-stalks. It is really amazing to gather the center foliage together and behold the enormous productiveness of the "Marvel."

The ruddy glow of the Marvel spreads evenly and leaves no white tips. It is very firm and a peerless shipper; excellent for a fancy private trade and home use.

**A Two-Crop Variety**—It ripens a monster crop of very early berries, after which, if the tops are cut off, plants cultivated and, if possible irrigated a few times, they will bloom again in July and produce a second crop, lasting until winter.

**REPORTS ON THE "MARVEL"**

"The most wonderful strawberry I have ever seen."

"I claim to be an expert on strawberries, but the 'Marvel' has never been equalled in perfection, color and quality."

Don't use plants from old berry fields. Buy our healthy vigorous, properly grown plants. The most profitable kind.



Wellington "Marvel" plant with some leaves removed to show mass of young fruit.

**Prices for 1919**

**NOTE.**—We have each year reduced the selling price of this wonderful berry, just as much as our 5-year contract with Mr. Butler would permit. At these low prices do not delay planting liberally.

Three for 25c, 12 for 75c; 100 for \$5.00, prepaid. Order early and get a good start.

**BEWARE!** To protect our customers, all Wellington Marvel strawberry plants will be marked with a printed wooden label, as follows: **Originator's Stock Wellington Marvel** on one side and our name, **Routledge Seed & Floral Co.**, on the other. Plants not marked thus **ARE NOT OUR TRUE STOCK.**

"This certainly is a luscious berry."

"Put me down for 100 plants. The flavor is delicious."

"I will pay Mr. Butler a premium above market price for all the 'Marvel' berries he is growing."



## Strawberry Plants Continued



**OREGON IMPROVED.** One of the finest and most satisfactory strawberries ever introduced. It always looks bright, fresh and attractive. The berry is very large, firm and handsome; rich, dark red, extending to the center. The flavor is rich, sweet and delicious. For table use and canning, it cannot be surpassed. The "Oregon" ripens early and continues in bearing until late in the season.

**GOLD DOLLAR.** One of the earliest berries on the market. Fruit good, medium size, and attractive; rather tart; fine flavor; foliage, heavy, large and spreading, which protects the blooms from early frosts.

**MAGOON.** Berry large, fine and excellent; sub-acid flavor; bears heavily and throughout the season.

**WILSON.** A heavy bearer of fine, moderate-sized berries; sharp acid flavor. Many prefer this sort for canning.

**PRICE LIST.**—Your choice of above varieties, **PREPAID**, doz. 30c; 25 plants 40c; 100, \$1.25. **NOT PREPAID**, 25 plants 35c; 100, \$1.00; 1000, \$7.00; 500 plants all one kind at 1000 rate.

### The New Everbearing Strawberries

This "new class" of strawberries is becoming more popular each year. Their long fruiting season and the grower's ability to secure berries when the market is high is their real value. Left alone they will flower and fruit the whole season, but to secure a **large crop** in the **late fall** keep the blooms off until the last of June.

Your choice, doz. 50c; 25 plants 75c; 100 \$2.00 prepaid; 1000, write.

#### SUPERB-EVERBEARING

This we believe is the **best of the ever-bearing** kinds. **Superb** is a truly wonderful fall bearing variety. It is doubly valuable as it yields heavily, early as well as late. This new **Superb** is really a true everbearer and gives a good supply of **choice, rich, red berries**, until stopped by heavy frosts in the fall. This everbearing strawberry has real merit and a good flavor and color. Growers who have tested it on this coast are **enthusiastic** over it. A very profitable variety.

**MARSHALL.** One of our best Western varieties and very popular wherever known. Marshall is one of the blood-red varieties that never fails to attract the eye and to satisfy the taste. It is deliciously sweet, generously prolific, and is in every way an ideal variety for extensive planting or home garden. Excellent for canning, as it holds its color, shape and flavor.

**CLARK'S SEEDLING.** The berry that has made Hood River famous; excellent shipper; berries large, firm and of delicious flavor; vines bear large crops; is especially adapted to the Pacific Coast.

February 5, 1918.

Routledge Seed & Floral Co.,  
Gentlemen: The Strawberry Plants received from you last Spring were fine. I enclose \$4.55. Will send for Kirk System later.

Yours truly,  
C. W. HAMSHAW.

#### PROGRESSIVE EVERBEARING

A leading and popular variety in this class. Berries, rich red in color, firm and of delicious flavor. Good keepers and shippers. You will find this berry in the Portland markets late in the fall when prices are very high.

Corvallis, Oregon, April 23, 1918.

Routledge Seed & Floral Co.,  
Dear Sirs: The last 4,000 Strawberry Plants that I received from you are doing fine.

Yours truly,  
W. L. POWELL.

**DON'T** be misled by the fine catalogs sent out from the East. Buy Western grown plants and Western varieties, better berries than ever grew in the East. We know it!



## Why Not Raise Some Asparagus and Rhubarb

Every garden large or small should have at least a small supply. If you want special information on culture of these roots, we have **ASPARAGUS CULTURE**, by Hexamer, 174 pages, 60c, and **NEW RHUBARB CULTURE**, by Morse and Fiske, 130 pages, 60c.

### ASPARAGUS ROOTS

One of the earliest and finest of spring vegetables; very easily grown. A bed once planted is good for years if properly attended to and well manured. Set plants 18 inches apart, in rows 3 feet apart.

**ONE YEAR OLD.**—Prepaid, dozen 35c; 50 60c; 100 \$1.10. **Not prepaid**, dozen 25c; 100 85c; 1000 \$6.50.

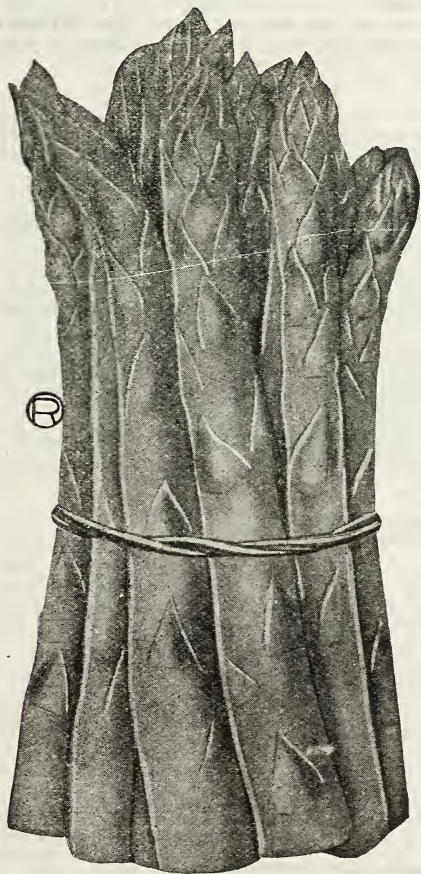
**TWO YEAR OLD.**—Prepaid, dozen 50c; 50 \$1.25; 100 \$2.00. **Not prepaid**, dozen 40c; 100 \$1.50; 1000 \$10.00.

**Buy Roots and Save 2 to 3 Years.**

### HOP ROOTS

**Regular Root Cuttings**, 50c per dozen postpaid. Low prices by the thousand.

**Crown Roots** give quicker results; each 15c; 2 for 25c; dozen \$1.00, postpaid.



Asparagus Tips.

### HORSE-RADISH ROOTS

Plant in the spring 18 by 24 inches apart. Set the whole root small end down.

Prices, 2 for 15c; 50c per doz.; \$2.00 per 100. Low prices by the 1000.

### RHUBARB

#### PIE PLANT—WINE PLANT

Plant in the fall or early spring from 3 to 4 feet apart, in the richest soil you have, or can prepare. New book: "Rhubarb Culture," a complete guide to dark forcing and field culture (well illustrated), 130 pages, 60c.

#### BANWINE RHUBARB—A Moneymaker

This comparatively new and very profitable rhubarb is claimed by our grower to be superior to all ordinary varieties and unequalled by any known marketable sort. The truthness of the strain is unquestionable, as it is only propagated from root diversions or growing buds from stock, that shows the **superior merits** of the parent stock.

**Banwine** is a quick, very early grower, producing very freely giant heavy stalks, that are exceedingly tender, brittle and of the finest flavor and color. A "peerless" rhubarb for home gardens or commercial plantings.

#### WAGNER'S GIANT

**Giant Crimson Winter.**—Our grower describes this as "about twice the size of Burbank's Giant Winter, and four times the size of Crimson Winter. Average stem is 1½ feet long and weighs ½ lb." This valuable variety has all of the good qualities of Crimson Winter plus large size. A sure money maker.

#### —PRICES—

Your choice above varieties. We supply **divided roots**, the only safe way. Seedlings do not come true.

**PREPAID.**—1 year (single bud) each 20c; doz. \$1.75. **NOT PREPAID**, each 15c; doz. \$1.50; 100 \$8.00.

**Two year** (double buds), **PREPAID**, each 25c; doz. \$2.25. **NOT PREPAID**, each 20c; doz. \$2.00; 100 \$12.00.

**Large Clumps** (4 buds up), **NOT PREPAID**, 40c to 75c.

#### VICTORIA MAMMOTH

A popular variety that has been grown for years.

**One Year.**—Each 10c; doz. \$1.00 postpaid. **Not prepaid**, each 10c; doz. 75c; 100 \$5.00.

**Two Year.**—Each 15c; doz. \$1.50 postpaid. **Not prepaid**, each 12½c; doz. \$1.00; 100 \$7.50.

**Rhubarb.**—If wanted in larger quantities, write for special price.

Medford, Oregon, April 24, 1918.

Routledge Seed & Floral Co.,

Gentlemen: The Rhubarb Plants are doing splendidly, the best I ever had, also Rose Bushes, and I feel sure that everything you send me will do equally as well. I am boosting you among my friends.

Yours sincerely,

DR. J. L. HILL.

**COW MANURE.**—It is troublesome, disagreeable and expensive for the city gardener to get it. We offer "C.M." **THE REAL PRODUCT**, in most convenient form, free from weeds. Read page 39 carefully. **YOU NEED THIS, AND ALSO "WONDER," PG. 38, FOR YOUR ASPARAGUS AND RHUBARB.**



# MISCELLANEOUS GARDEN TOOLS AND SUPPLIES

## Plant and Rose Stakes

Prices Not Prepaid.

**CEDAR.**—Round; painted green, white top; last and look well. Per doz., 3 ft. \$1.00; 3½ ft., \$1.25; 4 ft., \$1.50; 5 ft., \$2.00; 6 ft., \$2.75; 8 ft., \$4.00.

**BAMBOO.**—Inexpensive and very desirable for pole beans, etc., or flowering plants or shrubs.

**Note.**—State for what purpose you want them, as we have them stained green pencil thickness and natural color ¾ to ¾ inch thick.

Prices per dozen: 2 ft., 25c; 3 ft., 30c; 4 ft., 40c; 5 ft., 50c; 6 ft., 60c; 25 per cent less for pencil size green. Write for low price by the 100 or 1000.

## Wooden Labels

The tree and pot labels we offer below are strictly No. 1 labels, smooth and well made. The painted labels are "really painted," not dipped in oil. Ordinary lead pencil writing on the painted labels is always readable; it don't wash off.

### TREE LABELS

P. P. 4 lbs.	25	100	M
Painted, copper wired...	\$0.20	\$0.50	\$2.65
Unpainted, copper wired..	.20	.40	2.30
Unpainted, iron wired.....	.15	.35	2.00

### POT LABELS

	Wgt. per M.	25	100	M
Painted, 4-in. (P. P. 3½ lbs.)		\$0.15	\$0.40	\$1.90
Painted, 5-in. (P. P. 4½ lbs.)		.20	.50	2.30
Painted, 6-in. (P. P. 5 lbs.)		.25	.60	2.70

### GARDEN LABELS

Same style as above but thicker and wider.

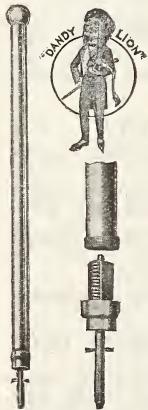
Painted, 8-in. (P. P. 15 lbs.)	\$0.40	\$1.25	\$9.00
Painted, 9-in. (P. P. 17 lbs.)	.50	1.75	10.00
Painted, 10-in. (P. P. 20 lbs.)	.60	1.85	11.00

## DANDELION AND WEED KILLER

A new, simple, yet practical tool that is automatic, quick and sure in its work. Cutting or pulling off the tops of weeds only makes the roots grow more vigorously; digging them out with a knife gives one the backache or lame knees, therefore use the "Dandy-Lion" same as a cane.

You simply fill it with solution (of gasoline, salt or vitriol, directions tell how) put the point on the root crown of the weed press a little, swing the top around in circular movement to open a hole and press down until the cross bar on the point (see cut) releases the fluid. The solution kills the root and all.

Spring, valve and base removable. Length, 34 inches. **PRICE, NO. 1, Brass Covered, \$1.75; NO. 2, Solid Brass, \$2.00.** Weight packed, 3 lbs.; add postage.



## Pots and Saucers



No. 1 No. 2 No. 3 No. 4  
Fig. 1—Fern Dish Filler; 2—Bulb Pan; 3—Azalia or Fern Pot; 4—Standard Flower Pot. All styles same prices.

Size	Prices		Saucers
	Each.	Doz.	Each.
2-inch	\$0.02	\$0.20	....
3-inch	.03	.30	....
4-inch	.05	.40	\$0.03
5-inch	.07	.75	.04
6-inch	.10	1.00	.05
7-inch	.15	1.50	.10
8-inch	.20	2.00	.10
9-inch	.25	2.65	.15
10-inch	.40	....	.20
12-inch	.60	....	.35
15-inch	1.50	....	.50

Prices by express or freight. Not mailable.

Should you wish a few small sizes by mail, write for prices packed.

## JARDINIERES, ETC.

We carry in stock a large and complete assortment of the best styles and latest designs. Limited catalog space will not permit us to illustrate and describe them,

### RAFFIA

Natural color, best quality. Very scarce, now \$1.00 lb. Write after August.

### WIRE HANGING BASKETS

Well made of heavy wire and painted green. 6-in., 20c; 8-in., 25c; 10-in., 35c; 12-in., 40c; 14-in., 50c. Not mailable.)

### GREEN MOSS

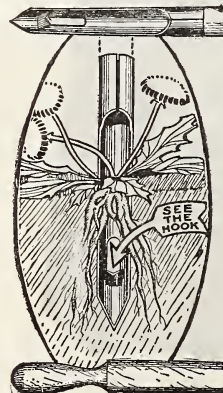
For hanging baskets, etc. 3 lbs., 25c; 2-bushel sack, \$1.50. For cheap moss for packing, write.

## HALL DANDELION PULLER

Here's a tool that gets the dandelion roots. and all, and operator stands up. No wet knees or aching back.

**Directions.** — Just

push the blade down in the ground close to the weed, press towards the weed and pull up. A patent hook near point of blade does the trick.



A slot prevents dirt from clogging the hook. Study the illustration carefully. Is made of polished steel and will last a lifetime. The only successful dandelion weeder to date. Wooden handle 30 inches long, steel part 8 inches. Price 60c;

postpaid, 70c.

We give the P. P. (Parcel Post) weight so you can add postage if wanted by mail. Don't forget to send it extra.



## Miscellaneous Supplies and Tools You Need

Remember to add postage if wanted by mail



### Rittenhouse Broadcast Seeder No. 3

A great favorite with farmers the world over. Works easily, automatic stirrer, anti-clogging, all-steel frame, strong cogs and gear. The lightest yet strongest and best. For seed or fertilizer. Sack holds  $\frac{1}{2}$  bushel. Descriptive pamphlet on request. (P. P. wt. 4 lbs. Price \$2.25.



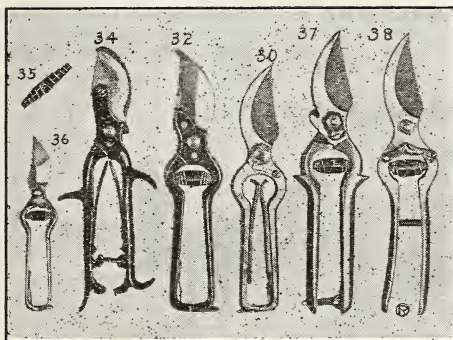
### "ALCA" GARDEN TOOL

Best all-around garden tool made. This remarkable combination tool is a trowel, fork, hoe, weeder and dibble—all in one. A spring releases the particular tool you desire. Light but strong and handles nicely. (15 inches long—see cut.) Price 65c, postpaid 75c.

### GARDEN TROWELS

Good, reliable, cheap trowels, 25c to 50c; extra strong and best made, 60c to 75c. Mailing and postage 10c extra.

**HAND WEEDERS.**—Several good styles—Diamond, 35c; Beet, hoe style, very good, 25c; Fork, 35c; Hxcelsior, five-claw, 35c, and Lang's. Postage and packing 10c extra.



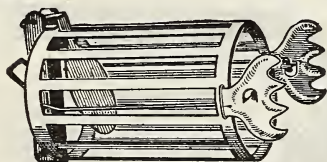
### TREE PRUNERS

Long handle tree pruners indispensable for pruning tall trees. Reliable make, with spring: 6 feet, \$1.50; 8 feet, \$1.75; 10 feet, \$2.00; 12 feet, \$2.25. Cannot go by mail. Extra blades 60c each, postpaid.

Remember—We sell Budding and Grafting Knives, Branch Shears, Garden Forks, Rakes, Spades, Hoes, Lawn Mowers, Sickles, etc. Call and see our stock or write.

Safe, Sure,  
Simple

### THE IDEAL GOPHER TRAPS



The Ideal Trap.

The only trap guaranteed to catch small or large pocket gophers. Being round, with thin edges, gopher walks into trap before detecting anything in runway. 100 per cent efficient—catches the gopher every time. Set one trap each way in the runway and you "get 'em going or coming. For safer and surer than poisons or gas. Hundreds of users have recommended the Ideal. Full instructions with each trap. Pamphlet on request.

Price, 60c postpaid, 2 for \$1.00

**CORN AND POTATO PLANTERS.**—We expect to have some stock. Write for illustrations and prices.

### LANG'S HAND WEEDER

HANDIEST  
TOOL  
ON EARTH. POSTPAID

25c

### HIGH-GRADE PRUNING SHEARS

All prices postpaid

No. 36. Nickel plated 6-inch, fine for cutting roses and light work, \$2.00.

No. 34. Same as illustration, except spiral spring; good, cheap shears. \$1.00.

No. 32. Strong, durable, black handle, polished blade; 8½ inches. Price \$1.35.

No. 32½. Nice finish, half polish, good blade; handles nicely; same style as No. 32; 9 inch. \$1.50.

No. 33. Same style as No. 32, full polish; very strong and serviceable; 9 inch. Each, \$2.25.

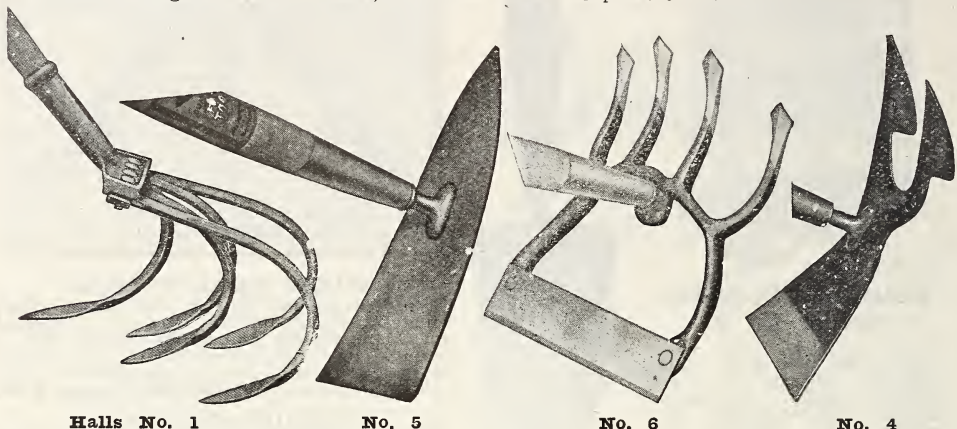
No. 30. Full polish, double brass springs, lock nut, one extra blade; steel band lock, Swiss style. 8 inch, \$3.25; No. 30, 9 inch, \$3.50. Nos. 37 and 38 not obtainable now.

"Quick as  
a Wink"



## Miscellaneous Tools That Every Gardener Needs

**Note.**—We give the P. P. (Parcel Post) weights so you can add postage if wanted by mail. Don't forget to send it extra, otherwise we will express them.



Halls No. 1

No. 5

No. 6

No. 4

### Hall's Garden Tools

Very popular, handy, light and good.

**HALL'S NO. 1.**—This has 5 adjustable steel spring teeth or cultivators. Spread 7 inches; length 6 inches; height 6 inches; 4 foot handle. (P. P. wt. 3½ lbs.) **Price \$1.25.**

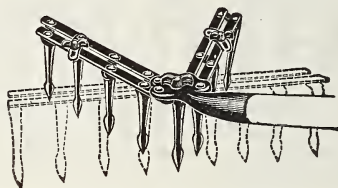
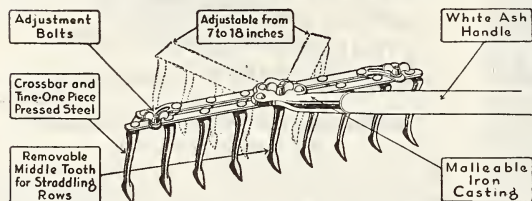
**HALL'S NO. 2.**—Same as above, only 3 prongs. A smaller and lighter tool for small gardens or narrow rows. (P. P. wt. 2 lbs.) **Price \$1.00.**

**HALL'S NO. 4.**—A double tool; a square hoe blade 4½ inches wide on 1 side and 2 cultivator teeth on other end. (P. P. wt. 2½ lbs.) **Price \$1.00.**

**HALL'S NO. 5.**—A double tool; a square 3-inch hoe tapering to a point on other end. (P. P. wt. 2¼ lbs.) **Price 80c.**

**HALL'S NO. 6.**—A combination tool; a 6-inch hoe blade on one side and a 4-tooth hoe or rake on other end. (P. P. wt. 4 lbs.) **Price \$1.15.**

### Pull Easy Adjustable Garden Tool



Study the illustrations above carefully and you will understand the make-up of this new tool. We used them in our gardens last year and were more than pleased. For pulverizing and loosening the soil and leveling it has no equal. You can do more and better work with this tool than with any other that we know of. It is not as heavy as it looks and the construction of the teeth keeps it in the ground, and you can cultivate between the rows as fast as you can walk. Try it; if not satisfied, we'll trade.

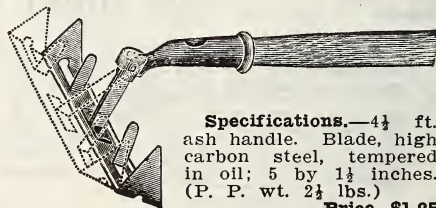
**NO. 1 PULL EASY**—9 teeth (P. P. wgt. 4 lbs.), **\$1.75**; **NO. 2 Jr.** or ladies' size (P. P. wgt. 2½ lbs.), **\$1.00.**

**Cultivator attachment** for fastening No. 1 or No. 2 to Planet Jr. Wheel Hoe, **50c.**

### Pull-Easy Rocker Hoe

**A new style, practical, labor and time saver.**

The **PULL-EASY** Rocker Hoe does not waste any effort. It is used about an inch or more below the surface with about the same movement as using a mop. The keen two-edged blade cuts off all weeds below the surface while the four upstanding teeth and the pivot leg, in the same movement break up the soil and produce the most desirable dust mulch.



**Specifications.**—4½ ft. ash handle. Blade, high carbon steel, tempered in oil; 5 by 1½ inches. (P. P. wt. 2½ lbs.)

**Price \$1.25**

**Standard makes of HOES, RAKES, SPADES, SHOVELS, ETC., on hand at all times.** Call or write if interested.



## WHEEL GARDEN CULTIVATOR

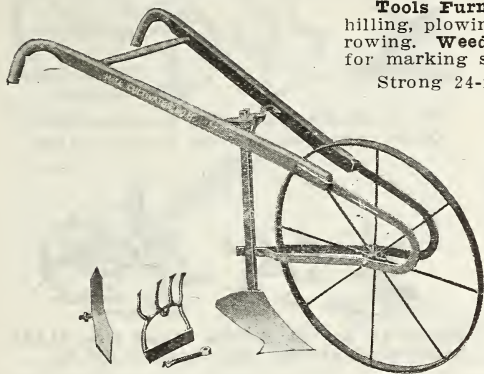
Just the right size and the right price for the average garden maker. Everyone who makes much garden should have one, as it reduces the labor on-half. Makes gardening a pleasure. Combination tools for all kinds of garden work. Does away with the tiresome hand hoeing, weeding, etc.

**NO. 6 HALL.**—Double handles quickly adjustable to fit man or child—adjustable draft for light and deep cultivation. **Swing Frame** gives the plow a hang or balance—making it easiest running plow on market. The double extended curved handles insure steady, even work. Each tool furnished is carefully sharpened, polished, and will scour in any soil.

**Tools Furnished.**—**Plow** or mould board for cultivating, hilling, plowing, covering seed. **Bake** for cultivating, harrowing. **Weeder** for cutting weeds. **Double Diamond Point** for marking seed rows, etc.

Strong 24-inch wheel. Weight 24 lbs. (Not mailable.)  
Price complete, only \$6.50

**NO. 1 HALL.**—This is a favorite with the ladies and children as it is smaller and lighter. It has a "straight to axle" adjustable handle and a 16-inch wheel. Can be taken apart and sent by parcel post. (P. P. wgt. 14 lbs.) Price complete, \$5.00. This tool can go parcel post.



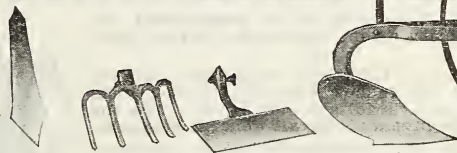
Hall's No. 6 Garden Plow and Cultivator

### SPECIAL

#### Hall Cultivator Attachments

Teeth similar to Hall's No. 1 Tool.

4 prong.....	\$1.00
5 prong.....	\$1.20
7 prong.....	\$1.35



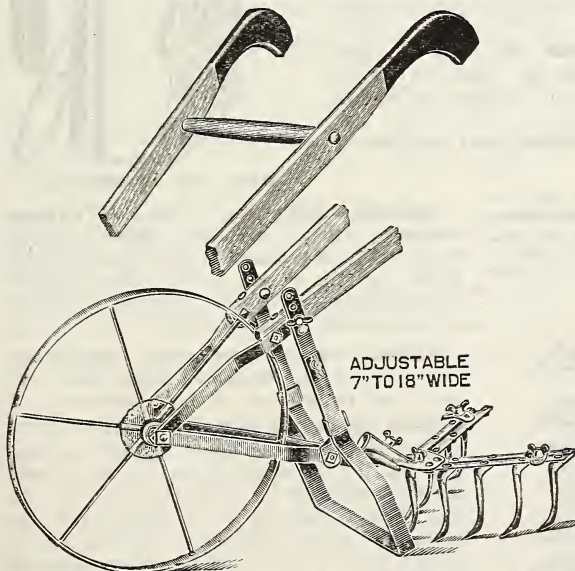
E-Z Garden Cultivator No. 1 with 5 tools (one reversible)

## New Pull-Easy Wheel Cultivator

In this new tool you get a sturdy weed and grass slayer and an ideal adjustable cultivator that will stand rough usage, yet so designed that it will do perfect work with ridiculous ease. It is light, strong and durable.

The weeder or cultivator can be used together or separately. The cultivator can even be detached and fitted on a hoe handle and used as a hand tool in beds or corners where a wheel hoe will not work.

For more information about the adjustable spreading cultivator attachment, see description of the Pull-Easy Garden Tool, page 119.



**SPECIFICATIONS.** — 4½-foot maple handles; electric welded, 14-inch iron wheel; cultivator adjustable 7 to 18 inches wide; weed slayer knife, No. 12 high carbon steel, 7½ inches wide. (Weight 12 lbs.) Not mailable. Price \$5.00.

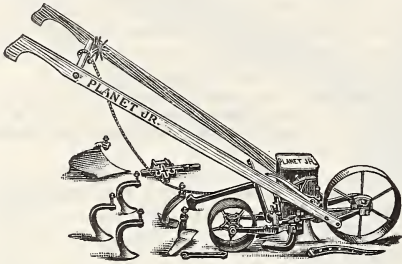
**WITH A GARDEN CULTIVATOR YOU CAN CULTIVATE YOUR WHOLE GARDEN IN THE TIME IT WOULD TAKE YOU TO HOE A FEW ROWS.**



## PLANET JR. GARDEN AND FARM TOOLS

For 40 years Planet Jr. Garden Tools have stood the test of world-wide usage and are recognized in every known country as the highest type of garden implement.

**FREE.**—1919 Planet Jr. 72-page Catalog, illustrated, descriptive and up to date, with complete price list, on request. Prices subject to change.

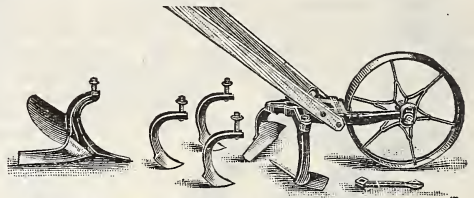


**Planet Jr. No. 4 Combined Hill and Drill Seeder, Wheel Hoe Cultivator and Plow.**

Weight, 5 lbs. Price \$20.25.

**Other Seeders from \$11.25 to \$40.50.**

**Planet Jr. Horse Hoes, Cultivators and Harrows for all kinds of crops. "Planet Jr. Catalog" tells all.**



**No. 17 Single Wheel Hoe as above, \$9.75**  
Other combinations from \$7.25 to \$11.25



**Planet Jr. No. 12, Double Wheel Hoe, \$13.25**  
Other combinations from \$8.25 to \$16.75.

**Safety First**  
**Cheaper than oil**

## DAD'S ELECTRIC LANTERN

**The Light**  
**of All Lights**

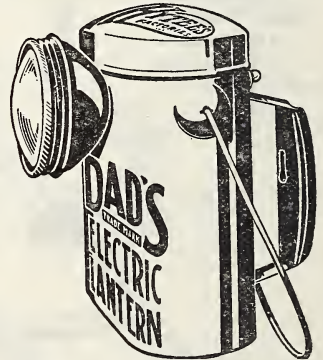
These are a little out of our line, but of great merit and of such value to the majority of our customers that we have decided to stock them.

**Dad's Electric Lantern** is a full-sized searchlight lantern. It stands 7½ inches tall, 5¼ inches wide, 2¾ inches thick, excluding the projecting bail, headlight and handle. **It's the most wonderful light ever invented for all general purposes.** It's in a class entirely by itself and should not be confused with flashlights or so-called electric lanterns using one cell.

**Dad's Electric Lantern** uses two ordinary standard 6-inch dry cells (or batteries), obtainable from us by parcel post or in your home town.

**DAD'S NO. 1 ELECTRIC LANTERN** (See cut).—A wide-angle, real light, that you can work by. Light is turned on or off in a second—no matches to scratch or danger from fire.

**Throws a powerful, illuminating, brilliant light 200 feet or more.**



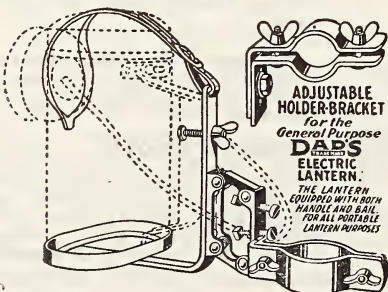
**Dad's No. 1 Electric**

Can be set down or carried by the bail or handle on the back. **Ideal for Dairy-men, Poultry Keepers, Campers, Travelers or Autoists.** We use these around the store and on all our outing trips. We couldn't do without our "Dad."

**PRICES**—Dad's No. 1 General Purpose Lantern, without dry cells, \$3.00 (mailing weight 2½ lbs.); **complete** with two dry cells, \$3.75 (mailing weight 7 lbs.). Add postage if wanted by parcel post. (Get dry cells at your store and save postage.)

**EXTRA PARTS**—Reflectors, 75c; Lens, white or red, 35c; Tungsten Bulbs, 40c, post-paid; Dry Cells (wgt. 2½ lbs.), 50c each.

**Dad's Adjustable Holder Bracket.**—This is a strong, well made holder to set the lantern in if you want to use it as a **head light** or **tail light** on a vehicle, auto or boat. The holder fastens on securely and the lantern is quickly fastened in place or removed when you need it for other purposes. No. 1, **Price \$1.00** (weight 2¾ lbs.)—add postage if wanted by parcel post.



Pamphlet giving full information and illustrations on request

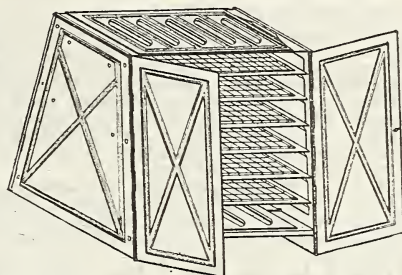


## HOME FRUIT AND VEGETABLE EVAPORATOR

Dry your surplus fruit and vegetables by the latest method of evaporation. This outfit comes to us with a money-back guarantee that it will do perfect work if directions are followed. It costs nothing to operate the "Home," as it sets on the back of your cook stove and uses the surplus heat when you have fire for other purposes. It is not necessary that a continuous fire be kept in the stove. Of course, it is natural that the more continuous the heat the quicker the fruit or vegetables will dry.

Operators of the "Home" claim that apples dried or evaporated by this new process will make up into pies that cannot be distinguished from those made from fresh fruit; that beets, peas, beans and other vegetables can be freshened up in water and be the equal of "fresh picked."

**Specifications.**—Made of 28-gauge, polished blue steel, 18x20 inches at the bottom, 12x20 inches at the top, 24 inches high. Drying surface of the wire trays, 14 square feet. Can be folded up when not in use. Weight, boxed for shipment, 35 lbs. **Price \$15.00**, prepaid.



**Directions.**—A book is packed in each evaporator, giving complete instructions how to use it, when to pick the fruit or vegetables, how to prepare them for the evaporator, how long to evaporate them and when finished and what care to take of them after evaporating. All instructions are based on experiments, and if these instructions are followed excellent results will be produced.

## Dunham Water-Weight Lawn Rollers

This roller has a water-tight steel drum which can be filled with water to make it heavy, and emptied when storing away.

The roller is fitted with steel roller bearings and is an easy running, long-wearing machine. Ask for booklet—"The Proper Care of Lawns"—free. We carry the following sizes in stock.

Order No.	Drum Sizes	Number Sections	Empty	Filled Water	Portland Sand	Prices
WB3....	14x20 in.	1	65	200	300	\$14.50
WB5....	18x24 in.	1	80	300	500	18.50
WB7....	24x24 in.	1	125	500	800	23.50
WB11....	18x24 in.	2	115	330	500	25.00
WB13....	24x32 in.	2	170	650	1000	33.00
WB15....	24x24 in.	2	145	500	800	29.25

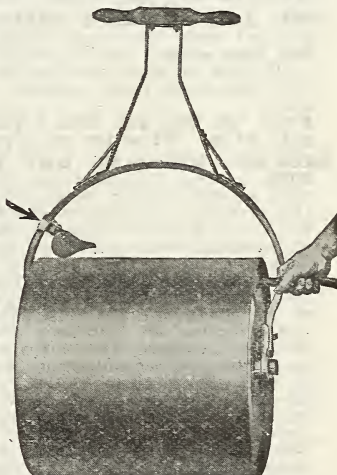
During Winter Months freezing and thawing and heavy rains loosen the soil and heave the turf away from the sub-soil, leaving millions of sensitive "feeder-roots" exposed to the air. In the spring when the grass should start growing these roots soon dry out and die.

In summer, too, sun and wind tend to dry out, bake and crack the surface soil around the roots and this is equally harmful to the lawn. A good roller will compress the soil around the roots, and press the turf back against the moist sub-soil so the roots can absorb the water and plant food.

Rolling occasionally throughout the summer (especially after heavy rains) keeps the surface even and prevents the soil drying out. It discourages the work of worms, ants, moles and gives a smooth, even lawn for the mower to run over.

It is absolutely impossible to keep a lawn, large or small, in perfect condition without rolling, no matter how many other things may be done in taking care of it.

**FREE—"THE PROPER CARE OF LAWNS."**—This gives you full information about these Lawn Rollers and valuable information on the subject of lawns and how to keep them.



Dunham Lawn Roller  
(Showing new "No Tip" handle lock and how to fill.)

## "Target Brand" Weed Killer

FOR LAWN TENNIS COURTS, PATHS, ROADWAYS AND ANY OTHER PLACE WHERE YOU DO NOT WANT GRASS OR WEEDS TO GROW

Guaranteed to destroy weeds, grass, poison ivy and all undesirable vegetation. Keeps roadways and paths free from weeds. Cleans tennis courts and ball diamonds. Cleans alleyways and fence corners. An effective combination of high grade chemicals which diluted in water at 1 to 50 destroys the roots as well as the tops of all vegetation. One gallon diluted will cover 100 to 150 square yards; and one or two applications are sufficient for an entire season. (Not mailable.)

Price, pt. 40c; qt. 60c; gal. \$2.00; 5 gals. \$8.00. Write for price per barrel.



## SPRAYS, INSECTICIDES, ETC.

The best and most economical method of spraying is with a hand or power sprayer.

### ARSENATE OF LEAD

For spraying trees and shrubs or plants against the attacks of leaf-biting or leaf-eating insects of all kinds, such as green worms, slugs, etc. Especially valuable for spraying to prevent the codling moth on Apple and Pear, and should be used just before the calyx cups close, for eating insects, whenever they appear. Can be combined with other sprays.

**PASTE FORM Arsenate of Lead.**—It comes in paste form and is diluted in water at the rate of about 1 ounce to a gallon of water, or 2 to 3 lbs. to 50 gallons of water. (Not mailable.)

Price, 1 lb. jar 40c; 5 lbs. \$1.75. Low quantity price.

**DRY POWDERED Arsenate of Lead.**—Has many advantages over the paste, easier to mix and requires less, is more efficient on account of its extreme fluffiness and will adhere longer. Does not deteriorate, harden or freeze, consequently can be carried over. Use 1 to 2 lbs. to 50 gallons of water. 1 to 2 tablespoonsful to a gallon. Put up in sift proof cartons with adjustable tops. (Poison not mailable.)

Price, ½-lb. can 35c; 1 lb. 65c; 5 lbs. \$3.00. Quantity price on request.

### LIME AND SULPHUR SPRAYS

Particularly effective in the control of the following: San Jose Scale, Oyster Shell Bark Louse, Scale Insects, Fungus Diseases such as Peach Leaf Curl, Apple and Pear Canker, Apple Scab, Brown Rot of Peach or Plum, Blister Mite, etc.

**LIME AND SULPHUR SOLUTION.**—The original and old form liquid spray for San Jose scale. Use 1 part of this liquid to 9 parts of water for dormant spraying. We offer high grade quality. (Not mailable.)

Price, Qt. 25c; gal. 65c; 5 gals. \$2.50; 10 gals. \$4.25. Write for price per barrel.

### SHERWIN-WILLIAMS DRY LIME-SULFUR.

—A true type and not to be confused with substitutes or compounds offered on the market. Overcomes disadvantages of the liquid material such as the possibility of freezing, leaky packages, hauling bulky packages, etc. Has all the insecticidal and fungicidal qualities of the liquid material, and all of its advantages with none of its disadvantages. Is absolutely safe and effective not only as a dormant spray for scale, insects, etc. but also as a summer spray in combination with arsenate of lead. From 10 to 12 lbs. Dry Powdered Lime-Sulfur dissolved in 50 gallons of water should be used as a dormant spray; from 2 to 3 lbs. to 50 gallons of water in combination with the usual proportion of arsenate of lead should be used for summer spray on all seed fruits such as apples pears, etc.; from 1 to 1½ lbs. to 50 gallons of water in combination with the usual strength of arsenate of lead for summer spray of peaches, plums, and all stone fruits. (Mailable, postage extra.)

Prices, 1 lb. 30c; 5 lbs. \$1.35; 10 lbs. \$2.25; Write for quantity price.

### SCALE DESTROYER

**"Target Brand."**—A soluble oil spray of decided merit for San Jose scale, the most effective for leaf roller, all tree infesting scale and most soft bodied sucking insects. Has many advantages over Lime and Sulphur Solution, as it spreads more readily, getting into every little crevice. Will go twice as far. Has no bad odor, does not discolor and much more agreeable to apply

as it does not burn the eyes and skin; no clogging of nozzles, mixes easily. Use 1 gallon to 20 of water, after the leaves are off and up to time buds appear. For summer spray use 1 gallon to 100 gallons of water. (Not mailable.)

Price, pt. 35c; qt. 50c; gal. \$1.50; 5 gals. \$6.00; 10 gals. \$10.50. Write for price per barrel.

### BORDO-ARSENATE — Powdered

This combines the insect destroying properties of Arsenate of Lead and the fungus preventative qualities of Bordeaux Mixture. It is put up, as indicated, in dry, powdered form for convenient use, and can be used for either dry dusting or wet spraying. It is safe and efficient, and can be used for fruit work as well as truck and garden work. Used as a powder just as it comes from the package, in solution same strength Arsenate of Lead.

Price, 1b. 50c; 5 lbs. \$2.35.

### BORDEAUX MIXTURE

For Blight, Mildew, Rust and Fungus Diseases. Also prevents and cures Black Rot and Scab, and acts as a deterrent for insects on fruits and vegetables.

### BORDEAUX MIXTURE — PASTE.

—High grade, easy to use. All ready to mix with water at the rate of 1 pound to 5 gallons of water when the leaves are off; use 1 to 10 for summer when foliage is out.

Prices, 1 lb. can 40c; 5 lb. can \$1.50; 10 lb. can \$2.75. (Not mailable.)

### BORDEAUX MIXTURE — POWDERED.

—This is a perfect dry Bordeaux mixture concentrate in a dry powder. It is scientifically founded to insure perfect results, stays in suspension well and adheres to the foliage. It can be used in combination with other insecticide with an extraordinary degree of safety. For general winter use, 8 lbs. to 50 gals. of water; one-half strength for summer. (Not mailable.)

Price, 1 lb. 50c; 5 lbs. \$2.00; 10 lbs. \$3.50.

### BLACK LEAF "40."

—A concentrated solution of nicotine sulphate containing 40 per cent nicotine. Indorsed by the foremost experts of the U. S., for red bug, green and woolly aphids, trips, plant lice, codling moth, pear psylla and all sucking insects. Descriptive pamphlet on request. (Not mailable.)

Price, 1 oz. bottle 25c, makes 5 gals.; ½ lb. can 75c, makes 47 gals. spray; 2 lb. can, \$2.50, makes 240 gals. spray; 10 lb. can, \$10.75, makes 1000 gals. spray.

**Note.**—Fish oil soap mixed in this solution makes it more effective and is necessary for perfect results. It makes it stick and last longer. Use 4 lbs. to 50 gals. solution. Full and detailed instructions with each can.

### S-W PARIS GREEN.

—Poison, be careful. Usually four to six ounces to fifty gallons of water will be satisfactory. Price, 1 lb. 60c; 2 lbs. \$1.15.

### PRUNING COMPOUND OR PAINT

This paint has a heavy oil body which dries on the cut with a rubbery, elastic film that will last as long as a paint can be made to last. It will thoroughly seal up the open wound. In addition to its covering capacity it has other splendid qualities which make it more adaptable than tar or white lead. It is dark olive green in color, comes ready to use and should be applied with a stiff brush. Its low price and merit should appeal to every orchardist.

Price, qt 60c; gal. \$2.00.

**NOTE.**—Prices on Sprays, etc., subject to market changes. We are not allowed to mail poisonous sprays or insecticides.



## Sprays and Insecticides—Continued

### FREE BOOKS AND PAMPHLETS

The manufacturers of the insecticides we sell furnish us descriptive and instructive pamphlets on spraying, etc., and we will gladly pass them on to our customers. Although they are not prepared especially for the Pacific Coast, you will gain by reading them.



For many years the gardeners of the Pacific Coast have suffered from a scourge of root-maggots and worms that has made gardening, if not impossible, much more unprofitable than it should have been. Many remedies have been tried with little success until the "Carco" formula was discovered.

A wonderfully successful spray for destroying root maggots, grubs, etc., that infest Turnips, Radishes, Beets, Rutabagas, Cauliflower, Cabbage, Onions, etc., and also recommended for combatting crown borers in Strawberries.

To get best results, the ground should be sprayed freely before planting, then again as soon as the vegetables come up. Dip cabbage plants in a solution of "Carco" before planting. "Carco" is highly concentrated; use 1 part "Carco" to 100 to 125 parts of water. Descriptive pamphlet and testimonials on request.

Prices, 1/2-pint cans prepaid 40c; larger sizes by freight or express only; 1/2 pints 30c; pints 50c; quarts 75c; 1/2 gal. \$1.25; gal. \$2.00.

### BUG DEATH

**Non-poisonous.**—A most effective powder that kills the squash, cucumber and cabbage bugs, currant worm and all bugs and worms that eat the leaves of plants and vines. Bug Death is a wonderful protection against insects. Absolutely non-injurious. Contains no arsenic. Kills the bugs, prevents blight, revives and aids the healthy growth of plants and shrubs.

Prices: 1 lb. cans with perforated shaker tops postpaid 30c. By express, 1 lb. 25c; 5 lbs. \$1.00; 10 lbs. \$1.75; 25 lbs. and up 16c lb. Add postage if wanted by mail.

**TO DESTROY CUT WORMS.**—Take two quarts of bran, one and one-half pounds Bug Death, one pint of boiling water and one of molasses. Add the bran and molasses to the water, then stir in the Bug Death and you will have a dry mash, which, scattered alongside where the worms are working, will kill without injury to bees, birds or chickens. Why use arsenic, which is dangerous, when it is entirely unnecessary?

### NICO-FUME

The purest and most highly refined nicotine product offered for spraying, vaporizing and fumigation in Green Houses. Our Florists like NICO-FUME better than other similar preparations such as Nicotinic, To-bak-ine, etc., because it is safe and less expensive. Read descriptive pamphlet and be convinced. Free on request.

**Nico-Fume Liquid** for spraying or vaporizing; 1-lb. tin 50c; 1-lb. tin \$1.50; 4-lb. tin \$5.50; 8 lbs. (gal.) \$10.50. (Cannot mail.)

**Nico-Fume Fumigating Paper.**—Quick, safe and effective for greenhouse work. Price per can of 24 sheets 85c (weight 1 lb.); 144 sheets \$4.00 (weight 4 lbs.). Add postage. 288 sheets direct from factory prepaid for \$7.50, guaranteed fresh.

**FUMOTH FUMIGATORS.**—For killing moths, millers, mosquitoes, mites and lice in hen house, etc. Vapor does not injure clothing, furniture, etc. Full directions on the can. Price 50c; postpaid, 60c

### NIAGARA 3 IN 1—Dusting Mixture

This new preparation is meeting with great success everywhere. It is a combination of Sulphur, Arsenate of Lead and Tobacco dust. It is specially prepared and exceedingly fine, which insures a good even distribution and splendid sticking qualities.

A combined insecticide and fungicide for mildew, green or black lice or any leaf-chewing insects. Apply with a powder gun (see page 130). No muss or slopping liquids to contend with. (Not mailable.) Prices in bulk: 1 lb. 35c; 5-lb. sack \$1.00; 10-lb. sack \$1.50. Write for quantity prices.

### SULPHO-TOBACCO SOAP

For spraying or sponging or dipping ferns, palms or potted plants, or spraying roses, shrubs or vines it is invaluable. Kills Aphis, Red Spider, Plant Lice and Sucking Insects. Acts quickly and effectively against these pests. Will not injure the tenderest plant. Two ounces of soap make a gallon of solution. Non-poisonous perfectly safe and yet very efficient.

Prices: Postpaid, 3-oz. bar 15c; 8-oz. bar 25c.

**RAT CURE.**—Never fails. It is in tablet form, ready to feed from the can; no mixing. No odor after death. A rat or mouse less for every tablet at a cost of less than 1 cent. Ask for pamphlet giving testimonials if in doubt.

Price 30c per can; 4 for \$1.00, postpaid.

**TOBACCO DUST.**—Valuable as an insecticide. 1 lb. 15c; 10 lbs. \$1.25

**GRAFTING WAX.**—We sell Target Brand, a high-grade preparation.

3/4 lb. 20c; 1/2 lb. 30c; 1b. 40c; postage extra.

**FISH OIL SOAP.**—For aphis, plant lice, etc. Best grade. Postage extra. 1/2 lb. bar 15c; 1 lb. 25c; 10 lbs. \$2.00; 100 lbs. market price

**SULPHUR POWDER.**

1b. 10c; 100 lbs. market price

**SULPHUR CANDLES.**

Each 10c, postpaid 15c; 3 for 35c

**PHENOLA.**—A cold-water disinfecting, white paint. It looks better and will outlast whitewash. Paint or spray it on any surface. For poultry houses, barns, public buildings, cellars, dairies, etc. Takes the place of paint and disinfectant. Easier to use, quicker and much cheaper. Use 1 to 2 lbs. to a gallon of water, enough to cover 200 to 300 square feet. Descriptive pamphlet on request.

Price, 1 lb. can 25c; 5 lb. can \$1.00; 10 lb. can \$1.75, postage extra. Quantity price on request.

**UNSLACKED LIME.**—For making whitewash, etc.

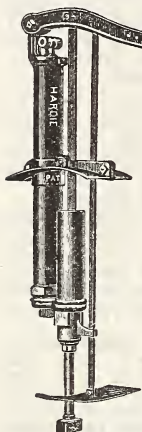
Price, 1b. 10c; 5 lbs. 40c; 10 lbs. 50c. Add postage. Barrel price on request.

**FREE ADVICE.**—If you will write and tell us what insects or plant disease you want to combat we will advise you to the best of our ability.



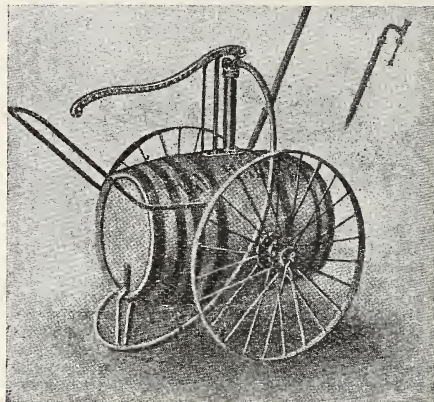
## SPRAY PUMPS AND SPRAYERS

Our experience shows us that if you get a good outfit, one large enough to do your work, you will spray well and as often as necessary; but if you get a cheap outfit or one that is too small, you will become disgusted, throw it aside and let this most important work go undone. Hardie Mfg. Co.'s handsomely illustrated spray pump catalog on request.



No. 6 Hardie.

The strongest, most powerful and satisfactory spray pumps for barrels or tanks. All working parts are of brass. Perfect agitation of the spray mixture is secured by a mechanical agitator, which works with each stroke of the handle (notice cut carefully). The construction is simple. The pump can be repacked or plunger tightened easily and quickly. No pipe wrench needed. All the valves are round, hard brass balls.



Hardie Wheel Outfit No. 21.

Catalog No.	No. Trees Suitable for	Capacity per Hour	Size of Plunger	Handle Stroke	Prices	
					A. B.	W. I. C.
NO. 5.....	25 to 30	50 gal.	1½ inch	4 inch	\$17.25	\$15.50
NO. 6.....	30 to 75	75 gal.	2 inch	4½ inch	20.50	18.00
NO. 7.....	100 up	120 gal.	2½ inch	5 inch	22.00	25.00

NOTE.—A. B., all brass—W. I. C., with iron air chamber

**BARREL OUTFITS.**—Most every one has different ideas and opinions as to just what kind of an outfit they require, therefore we offer no combination, but you can figure out the cost as follows: Price of pump, spray hose, extension rods, nozzles, and then take 10 per cent off. Free instructions for mounting. Barrel "pump plates" or holders for end or side; state which you prefer. For nozzles, hose, extension rod, etc., see following pages.

Free instructions for mounting. Barrel "pump plates" or holders for end or side; state which you prefer. For nozzles, hose, extension rod, etc., see following pages.

If you want the pump mounted on a barrel with side non-roller cleats, hinged filler door, with strainer, add \$7.00.

### WHEEL OUTFIT, NO. 21

A most satisfactory outfit and one of our best sellers. Especially designed to meet the needs of the small fruitgrower, gardeners and florists, for all-round spraying. It has the capacity and power to do good work rapidly. Dairymen, poultry keepers and farmers will find this outfit most useful for whitewashing, disinfecting and general spraying. The 30-gallon barrel is mounted on strong wrought-iron wheels, 26 inches in diameter, with 1½-inch tires. No. 5 pump, 5 feet best hose and couplings, 8-foot bamboo rod and leakless stopcock, 1 Vermorel nozzle. Price \$30.00

### HARDIE BUCKET PUMP

A high-grade, all-brass bucket pump, especially designed to meet the long-felt want in this line. It is the only bucket pump on the market that has a mechanical agitator and that is so designed as to always stand in position in the center of the bucket. This new device for holding the pump firmly in place in the center of the bucket enables the operator to move or carry the whole outfit with one hand. A practical outfit for light work. This is the only bucket pump in the market that is giving entire satisfaction. Good-sized air chambers enables one to maintain a high pressure and continuous spray.



HARDIE ORCHARD SPRAYING GUN, \$12.00

One man with this can do the work of four and do it better. Large orchardists should investigate this new money and man-power saver. Full information on request.

### BUCKET OUTFIT NO. 10

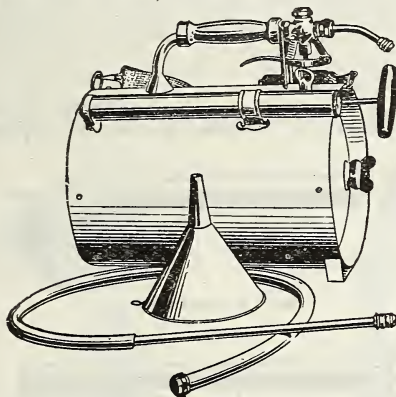
Price, including No. 4 Pump, one 5-gallon heavy wooden bucket, three feet best ½-inch hose, one spraying lance 18 inches long, one Vermorel nozzle, price \$12.50.

To reach the tops of tall trees, you should order, extra, an extension rod. For price of extension rods, see page 129.



**LOWELL FOUNTAIN SPRAYER**

Every city gardener, florist and poultry keeper needs a Lowell Fountain Sprayer; clean and easy to operate; no need to get any spray on your hands or clothes; will last a lifetime with reasonable care. (Try one at our store.)

**Lowell Fountain Compressed Air Sprayer.**

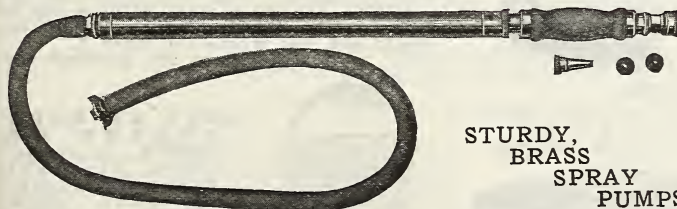
**Special Features:** Capacity 3 gallons; can be carried by the handle (see cut) or a strap that goes over the shoulder. The automatic controlling valve under the handle is easily operated with one finger. You have perfect control of the spray and don't waste any. The air pressure pump is outside where you can get at it, the filler plug is well made and fits tight. The tank after being seamed and riveted is dipped into molten solder, making it absolutely air-tight and the strongest Air Pressure Sprayer made, standing five times the air pressure necessary to operate.

Hose with 4-inch rod, 2 nozzles and filler funnel, with each outfit. The short crook and nozzle shown in the cut is used without the hose when spraying vegetables. For reaching the under side of leaves of low bushes, attach the hose and use the **vine attachment** extension rod. For high spraying use as many **two-foot extensions** as needed. Descriptive booklet on request.

**Prices:** No. 111 brass tank \$9.00; No. 110 galvanized tank \$6.50. (Wgt. boxed 12 lbs.)

**NOTE.**—Can be sent by parcel post.

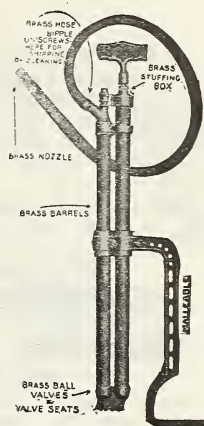
**Extras.**—2-foot brass extension rods, each 75c; **vine attachment**, 2-foot extension with bent neck, each \$1.00. (P. P. 1 lb.)

**STURDY, BRASS SPRAY PUMPS**

A simple, powerful, low-priced pump for every kind of spraying, whitewashing, disinfecting, etc. Adjustable nozzles from fine mist to solid stream; brass ball valves; 3½-foot suction hose, which is placed in a bucket, barrel, knapsack or water trough. As a fruit or vegetable sprayer, washing windows, buggies, autos or as a fire extinguisher it has few equals. (Wgt. 6 lbs.)

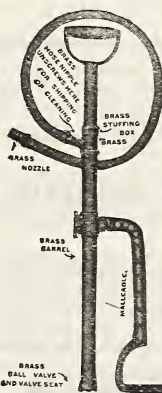
**Price \$5.00****NO. 26 O. K.****BUCKET PUMP**

(See cut) — Constructed entirely of brass. It is furnished with three feet of best quality rubber hose, detachable; malleable iron stirrup, three interchangeable brass nozzles which throw a fine mist, coarse spray or a solid stream. Pump is provided with large air chamber, with brass ball valves and valve seats. Throws a continuous spray; neat in appearance as well as durable in construction. Much superior to pumps of this class. (Wgt. 8 lbs.) See cut. **Price \$5.25**

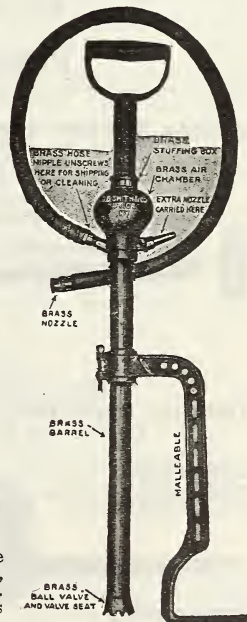
**O. K. Bucket Pump**

**NO. 29. ALL-BRASS BUCKET PUMP.**—The best low-priced spray pump on the market. Double air chamber enables the operator to keep constant pressure with little effort. One fine, one coarse nozzle, 3-foot hose. (Wgt. 7 lbs.) **Price \$4.25**

**NO. 32.**—Well made; all working parts brass; larger capacity; bulb air chamber produces continuous spray; works easily; two nozzles. (Wgt. 12 lbs.) **Price \$7.25**

**No. 32**

**NO. 28. WHEELWIND WHITEWASHER.**—Galvanized tin, brass plates, steel footrest, 3 ft. hose, double nozzle (wt. 5 lbs.) **Price \$3.00.**

**No. 29**

**DON'T WAIT** until the fungi, such as mildew, rust, black spot, etc., have attacked your roses and trees; the fungicide sprays are merely preventives and should be used in the fall or early in the spring. After the disease has developed, it may be too late to save the plant.

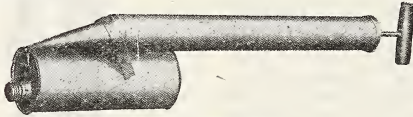


## SPRAY PUMPS—Continued

### HAND SPRAYERS OF "MERIT"

The "Perfect" Sprayers offered below are well and properly constructed of heavy, high grade material. We offer the "Lowell" line, far superior to most makes. Full size, 20 inches long, capacity 1 quart. Adapted for all kinds of general spraying. Your choice of styles.

**NOTE**—When ordering these hand sprayers by mail add postage, **ALSO** packing charge.



No. 7 Perfect.

No. 6 or No. 7 (P. P. weight 2 lbs.) your choice, each 75c. Packed to mail, 15c extra.



No. 6 Perfect.

**MIDGET SPRAYER**.—Same style as No. 7 Perfect, but smaller; capacity, pint.

Each 50c; postpaid 65c

**BABY MIDGET**.—Similar in style to No. 6, but smaller capacity.

Each 40c; postpaid 55c

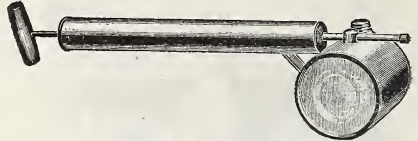
**RED CLIPPER**.—Similar in construction to our No. 5. A continuous sprayer. While not as large or satisfactory as No. 5, it does very well, price considered.

Each \$1.00; postpaid \$1.25

### NO. 5 CONTINUOUS SPRAYER

Has 2 spray caps for spraying up, down, straight ahead or at any angle and is so constructed that it not only sprays on the downward stroke of plunger, but also when it is drawn back, thus causing a continuous mist-like spray, enabling one to spray three times as fast and with one-third the labor. Length 20 inches. Capacity, one quart. (P. P. weight, 2 lbs.)

Each, **TIN**, \$1.25; **GALVANIZED**, \$1.50; **BRASS**, \$1.75. (Packed to mail, 15c extra.)



No. 5 Continuous.



NO. 3 GLASS TANK

Well constructed, the glass reservoir which is a quart Mason jar, is not affected by any kind of spray. You can have several jars of different sprays (already prepared) and when you wish to change, take out one and put in another. No delay. Extra long air chamber, special plunger and throws a strong, fine spray in any direction. (P. P. weight, packed, 5 lbs.)

Each, \$1.25; packed to mail safely, 25c extra

## Powder Sprayers, Blowers and Dusters

These are used for applying Sulphur, Bug Death, Dry Bordeaux or insect powder of any kind.

**LOWELL POWDER GUN** (See cut).—Heavy tin. Finished in aluminum. If the powder is sifted and dry it will not clog; guaranteed. Throws a fine cloud of powder. Capacity 1 quart. (P. P. 2½ lbs.)

Price \$1.25; packed to mail, 15c extra



Lowell Powder Gun

**NIAGARA DUST GUN**.—A new style, light weight, durable and powerful dust gun.

Price \$3.00

**DEFENDER**.  
Holds about 1 oz.  
20c; postpaid 25c.



**WHIRLWIND**  
Holds about 4 oz.  
Larger, Better.  
50c; postpaid 60c.



**DICKEY BUG DEATH DUSTER**.—For using when applying Lime, Dust or Powder of any kind. For use on small gardens this is very handy. Saves powder, puts it on evenly and just where you want it. (P. P. ¾ lb.)

Each 50c; postpaid 65c



**ACRE AN HOUR DUSTER OR SIFTER**.—Bucket shaped, straight sides, made of heavy tin, good handle, holds 5 lbs. powder. A simple twist of the wrist does the work. As its name implies, you can cover an acre of plants an hour. (P. P. 2 lbs.)

Each 75c  
Postpaid \$1.00

• **BY MAIL**.—When ordering the above sprayers by parcel post be sure to include extra money for postage unless they are marked postpaid.



## BAMBOO EXTENSION RODS



These are necessary for spraying trees. Our stock is made up in the best possible manner. No. 1 bamboo poles lined with either aluminum or steel tubing, screw threaded into brass connections at either end. Stopcock or cutoff necessary to make connections complete.

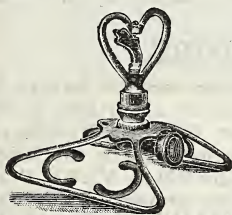
	6 ft.	8 ft.	10 ft.	12 ft.
ALUMINUM LINED ..... (Brass lined 25c less)	\$3.10	\$3.50	\$3.75	\$4.00
STEEL LINED .....	1.75	2.00	2.25	2.50

EXTRAS FOR EXTENSIONS.—Stopcock, each \$1.25; Angle Cutoff \$1.50; Drip Guard 30c.

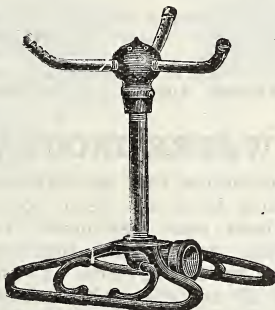
## NOZZLES, SPRINKLERS, RODS, EXTRAS, ETC.

ROSE AND PLANT STAKES, WEED KILLERS, ETC., see pages 118-123.

INVESTIGATE THE KIRK SYSTEM of spraying insecticide and fertilizer through the garden hose. See pg. 40.



Busy Sprinkler



Pluvius Sprinkler



Fountain Sprinkler

### LAWN SPRINKLER

Don't waste time holding the hose nozzle—use lawn sprinklers, and change positions as often as necessary.

Pluvius Lawn Sprinkler—11 inch, upright standard, 3 brass arms. (P. P. 4 lbs.) Each \$2.00

Monarch or Midget—Same style as above, 5½ inch. (P. P. 2½ lbs.) Each \$1.25

Busy Lawn Sprinkler.—Covers 25-foot circle. Very desirable for medium sized yards. (P. P. 3 lbs.) Each \$1.25

Fountain Sprinkler.—Circular brass tube. Large \$1.50; Small, sprays square, 85c; Half Circle 75c (postage 10c, any style).

Little Wonder.—Cheap, but good. Excellent in small yards. Covers 20 feet. (P. P. 1 lb.) Each 50c

No. 31—Diamond Hose Nozzle.—Best for sprinkling; adjustable from solid stream to a fine spray. (P. P. ½ lb.) Each 75c

Fountain Shower Hose Nozzle.—Makes a very fine mist-like spray. 35c; 50c postpaid

No. 41—Dandy Hose Clinchers.—Best mender made, simple and quick; nothing to catch; sure to hold.

Postpaid, ½ in., 15c; ¾ in., 20c

Dandy Hose Couplings—(Clinchers). Each 60c

No. 40—Garden Hose Connections. Both male and female couplings.

½ in. or ¾ in., pair 50c (6 oz.)

Hose Washers. Doz. 10c, postpaid

No. 45—Metal Mender Tubes. ½ in. or ¾ in., each 10c postpaid

No. 42—Hose Clamps, single band. ½ in. or ¾ in., each 10c postpaid

No. 44—Hose Clamps, double band. ½ in. or ¾ in., each 15c postpaid

### SPRAY PUMP NOZZLES

Single Bordeaux (Best for Whitewash). \$1.25

Single Vermorel (Very Fine Spray)... 1.10

## SPRAY AND GARDEN HOSE

We offer new stock only of high-grade hose for spray pumps and garden purposes. We advise our customers to buy the best. It is cheapest in the end. Don't buy old stock.

**XXX GRADE (Won-Kinkable).**—Guaranteed. This hose gives excellent satisfaction. Good enough for any ordinary spraying outfit, and by far the best hose for florists' or gardeners' use. One customer reports that he used a 50-foot length of this grade for 3 seasons continuously, which proves that it is the cheapest hose to buy. We have this on 500-foot reels, and cut any length wanted.

Price per foot, corrugated or smooth moulded, ½ inch, 20c; ¾ inch, 22½c. (Couplings free on 50 ft. lengths.)

**SPECIAL SPRAY HOSE.**—The highest grade extra heavy spray hose made; guaranteed.

Price, ½ in. only, 24c ft.

**AERO COTTON HOSE.**—Makes an excellent garden hose for those preferring cotton on account of lightness. Made of 4-ply canvas with a good, thick, rubber lining.

Price in 50-ft. lengths with couplings, ½ inch \$5.00; ¾ inch \$6.00.

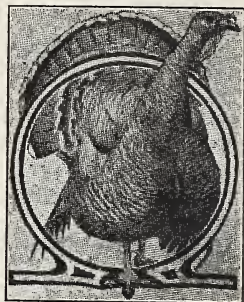
**PLANT SMALL FRUITS** around your garden. What's nicer than delicious fresh fruit, fresh from your own garden? See Fruit Department, pages 108 to 116.



# Routledge Seed & Floral Co.'s

UP TO DATE  
"HIGHEST QUALITY"

## POULTRY SUPPLIES



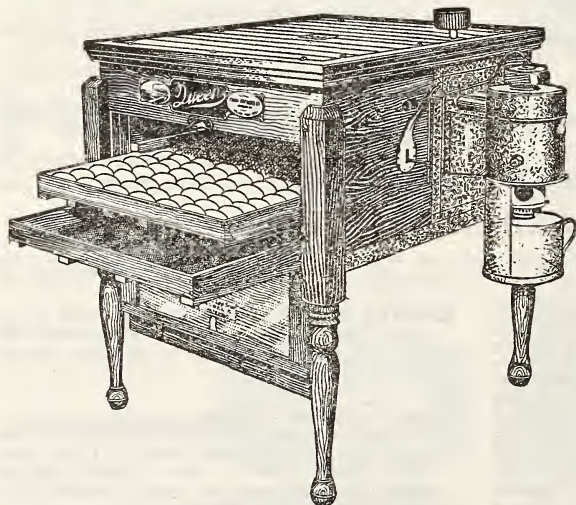
We have in stock practically everything needed and used in the profitable rearing and keeping of poultry and offer you what we believe to be the **best line** of Incubators, Brooders, Supplies, Foods and Remedies in the U. S. A.

We are not wedded to any one make or line of supplies, and when we find something of **superior merit**, we buy it. We are **Western Agents** for the **Queen Incubator Co.** of Lincoln, Neb.

### QUEEN HOT WATER INCUBATORS.

It is with great pleasure and satisfaction that we offer to our western buyers the **QUEEN INCUBATORS**. While they have not been extensively advertised in the Pacific Northwest several carloads have been distributed from Oregon, Washington and California points and we find upon investigation that they have given the **BEST OF SATISFACTION** and have many staunch friends. The **QUEEN** is **VERY POPULAR AND HIGHLY PRIZED** in all localities where they are known. They have been manufactured for 20 years and **EACH YEAR THE DEMAND IS GREATER**.

**THE QUEEN INCUBATOR COMPANY** enjoy a large, growing, profitable and satisfactory business, and **THERE'S A REASON**. They are willing to live and let live—they don't crave publicity by lawsuits, damage claims, etc.—they don't want to put all other manufacturers out of business—they don't claim every egg put into a Queen Incubator will hatch—they don't bluff and brag. **BUT THEY DO** build a **PRACTICAL, HONEST, SUCCESSFUL INCUBATOR** and offer it at a reasonable price. The Queen Incubator Company is composed of a **HIGH GRADE CLASS** of **CLEAN CUT, HONEST, ACCOMMODATING GENTLEMEN** willing and anxious to help you succeed in your poultry work. **WE LIKE THEM AND THEIR MACHINES**—they have "**CLASS**," **DIGNITY** and **QUALITY**.



No. 3 Queen, 180 Eggs, a Favorite Size.

### WESTERN REPORTS

"I used two **QUEEN** machines last year with good results."

**DAVID LINGMAN**, Beaverton, Ore.

"I purchased a 130-egg **QUEEN** incubator and have taken off three hatches. First time I got 98 chicks from 103 fertile eggs, second time 78 chicks from 84 fertile eggs, and third time 88 chicks from 90 fertile eggs."

**H. J. CORRELL**, McMinnville, Ore.

"I have a 180-egg **QUEEN** and ran it twice last season in a tent, with the outside temperature 100 degrees. I got 80 and 85 per cent hatches."

**W. H. SEARLE**, Medford, Ore.

"I am pleased to report that every fertile egg hatched in my **QUEEN**. I am very well pleased with it."

**MRS. F. V. WESTBROOK**, Huntley, Wash.

"We have been running four 360-egg **QUEENS** for four seasons, and they have given entire satisfaction in every way. Any time we increase our hatching capacity, it will be with **QUEENS**."

**THE GALLOWAYS**, Geneva, Wash.

**Order Your Incubator Early. Don't Wait and Be Late**



# QUEEN INCUBATORS



No. 2 Queen, 125 Egg.

**QUEEN** incubators are famous for big hatches of **strong, healthy chicks** that live and grow. The **QUEEN** is accurately regulated—taking care of a temperature variation of 70 degrees without danger. It is built of genuine California Redwood—very scarce in these days of imitation and cheap substitution. Redwood **DOES NOT ABSORB THE ODOR** from the hatching eggs. Cheaper woods, and pasteboard lining in a great many machines, **RETAIN THE ODORS**, to weaken and kill the hatching chicks.

Remember, it is not how many you **HATCH** that counts, but how many you **RAISE**. Chicks that hatch out **WEAK AND WOBBLY**, live but a few days and mean nothing to you except trouble and loss. They make one sick of the poultry business. Most of the chicks you lose in the first two weeks die because they did not hatch out with enough vitality or strength for a good start.

## INSULATION

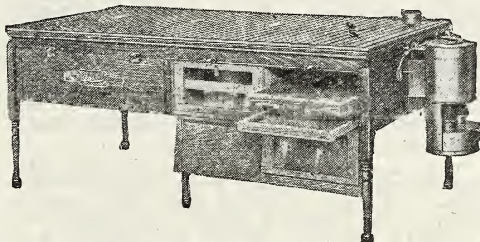
Many incubators, nowadays, are not well insulated. Proper insulation adds considerable expense to the manufacturing cost, and the manufacturers of cheap machines dispense with it, or use an inferior substitute. However, proper insulation is an absolute requirement of a good incubator.

Good insulation means a proper maintenance of uniform heat throughout the hatching period, less fuel and stronger chicks.

Poor insulation means a fluctuating temperature. The **QUEEN** is doubly insulated. First,

**EVERY MANUFACTURER CLAIMS HIS MACHINE IS THE BEST.** The most extravagant claims are often made for the cheapest and most flimsy machines. Unfortunately, there is at present no law to protect the public against irresponsible exaggeration, and it is wise for you to make some investigation.

**WE WELCOME ANY SUCH INVESTIGATION** and comparison, for you will find **MORE GENUINE VALUE IN THE QUEEN**, for the amount of money you pay, than in any other incubator on the market.



No. 25 Queen, 500 Egg (2 doors, 4 trays).

perature, more fuel and weak chicks. We use double walls of California Redwood, forming a dead air space. Second, we use corrugated strawboard **between** the wooden walls.

## HOT WATER HEATING SYSTEM

The **QUEEN** Hot Water system eliminates the injurious drying out tendency found in all hot air incubators and provides a soft, uniform heat over every part of the egg chamber that is most natural for the hatching eggs. This form of heat under ordinary conditions makes unnecessary the application of moisture, because in the **QUEEN** the circulation of water through the radiator neither adds nor takes away the moisture, and air is supplied to the eggs in a natural form as under a mother hen. Hot water is admittedly the best heat for incubators.

## SELF-SUPPORTING EGG TRAYS

It is expensive to have a tray of eggs slip out and drop to the floor. This cannot happen with a **QUEEN**. It has self-supporting egg trays.

## START YOUR CHICKS WITH A QUEEN CONSTITUTION

Many people write us that they have never known a machine that hatched such **STRONG, HEALTHY CHICKS** as the **QUEEN**. The **QUEEN** is not a cheap incubator, compared with many of the cheaply constructed machines on the market, but it is **CHEAP IN THE LONG RUN**. It will be turning out high percentage hatches years after the cheap machines have been junked.

## PORTLAND PRICES ON QUEEN INCUBATORS

We order in carload lots and can make prompt shipments. All machines fully guaranteed.

No. 1— 85 egg capacity.....	\$21.00	No. 25— 550 egg capacity.....	\$ 81.50
No. 2— 135 " " .....	29.50	No. 45—1000 " " .....	165.00
No. 3— 180 " " .....	35.00	No. 55—1500 " " .....	225.00
No. 4— 275 " " .....	46.00	No. 65—2000 " " .....	290.00
No. 5— 400 " " .....	57.00	No. 0— 65 " Lincoln .....	12.00
No. 25— 550 " " .....	81.50		

We will gladly mail to you a copy of the Queen Incubator Co.'s illustrated and descriptive catalog. It goes into detail and plainly shows you just how they are constructed and why they are so successful. Write us today; a postal will do.



# Queen Colony Brooder

**The only Brooder Stove with Automatic Control of Both Check and Draft.**

**DON'T HATCH CHICKS AND LOSE THEM—USE A "QUEEN."**

Without a question the "**Best**" brooder stove on the market today. **Note the improvements**—the self-feeding, straight fire bowl, no clogging like in the old barrel-shaped bowls. A full-size rocker grate, a real automatic wafer regulator that **really** works in connection with a **right-principle** damper or check valve. A fire-proof, ventilated stove base and a collapsible, four-piece hover (to save freight charges and to save room when not in use).

The **QUEEN** Colony Brooder is a **new and improved design** of brooder stove. It is made of highest quality iron castings that will wear and last indefinitely.

There are no drafts on the smoke pipe of the **QUEEN**. The check rests on top of the stove and opens outward when fire is too warm, thus giving a gentle inflow of air to retard the heat. While the opening of the draft to increase the fire is located on the top of the stove, it **opens into the fire at the base** through an opening extending down the side to the bottom. This feeds the draft **into the fire from underneath with no opening below the hover**. As will be seen from the illustration, the check and the draft lids are cast together and operated together. Thus, when the fire is too **hot**, the wafer automatic regulator **expands** and closes the draft and opens the check, but if at any time it gets too **cool**, the wafer **contracts** and **closes** the check and opens the draft. **This keeps an even heat all the time**, both night and day, in cold weather or warm, and **does it automatically**. You don't have to pay any attention to it whatsoever. Just set the regulator for the proper temperature at the start of the season—it **will do the rest**.

Next to a good draft through the chimney, the principal secret of a good fire in any stove is a **good grate** that will free the fire from ashes properly and prevent clinkers. The grate in the Queen stove is the **rocker type** and strikes the fire at four points. This is **far superior** to any draw-center or shaker grate, because it cleans the fire thoroughly and by striking at four points will break up and remove all clinkers.

The hover used on Queen stoves is collapsible and made of four pieces of galvanized

The Queen burns any kind of fuel with equally satisfactory results. We recommend chestnut sizes in all kinds of fuel, hard or soft coal, coke, charcoal, or briquettes burn equally well. Of course, hard coal will not cause the pipe to become dirty as quickly as others, but it will give no better heat.

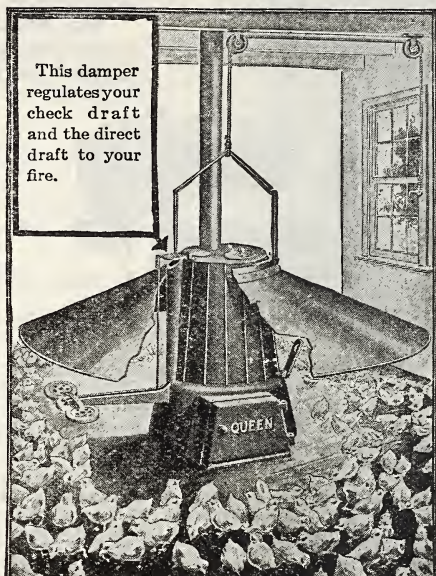
## QUEEN NO. 2 BROODER STOVE

This is the most popular size and will brood **any number** of chicks up to **1200**. Diameter of grate, 10 $\frac{3}{4}$  inches; diameter of hover, 52 inches. **Price, \$24.50.**

## QUEEN NO. 1 BROODER STOVE

This size is made for those who have limited room and do not need so great a capacity. No. 1 will brood any number of chicks up to **600**. Diameter of grate, 9 inches; diameter of hover, 42 inches. **Price, \$21.00.**

**NOTE—ORDER WHAT 3-INCH STOVEPIPE YOU NEED AT 30c PER 2-FOOT LENGTHS; ELBOWS, 50c.**



iron. This hover comes knocked down, with holes punched and stove bolts attached, ready for putting together. By being collapsible, it enables you to save room when storing and lessens the danger of damage when not in use. Hover has a cast-iron ring on top which sets firmly on top of the stove, and is furnished with a wire hook to which rope and pulleys may be attached. It is not necessary to raise the hover to put in coal.

The Queen stove provides a constant, correct heat, and a constant distribution that makes the chicks develop into **STRONG, HEALTHY CHICKS**. By brooding with a "**Queen**," the chicks get plenty of pure, fresh air, plenty of exercise, and there is **NO POSSIBLE CHANCE OF THEM CROWDING OR SUFFOCATING**.

## PERFECT SATISFACTION

Last season we handled a full carload of Queen Stoves and did not get a single complaint. **Queen Service Is O. K.**

Dallas, Oregon, Jan. 17, 1918.

Routledge Seed & Floral Co.,

Dear Sirs: I purchased my first Queen nine years ago. I have had several different makes since then, but have sold all of them but one and would like to sell it. I will keep the Queen,

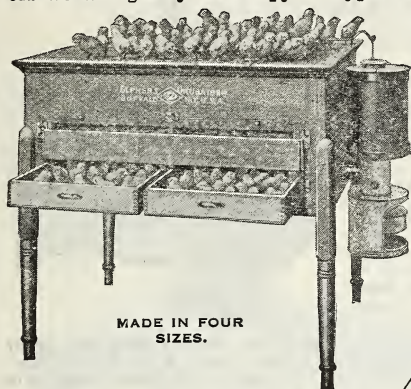
G. W. STARR.

Every chick hatched represents possible profit. The work laid out before you is to get this chick into a vigorous laying hen, or fit for market in the **SHORTEST TIME** possible. Start and finish them with "**Queens**."



## CYPHERS COMPANY INCUBATORS

**FREE IF INTERESTED**—If you want to know more about Cypher's Incubators and Brooders we will gladly mail copy of Cypher's Catalog free.



Cypher's 390 Egg Incubator

**CYPHER'S INCUBATORS** are built to hatch and to last. With proper care—the same care you would give a valuable piece of household furniture—a Standard Cyphers will last an ordinary lifetime. Machines sold many years ago are still doing first-class work.

For twenty years Cyphers' Incubators have been recognized as the "standard hatchers of the world." Tens upon tens of thousands of them have been sold and are in **successful use in every civilized country on the globe.** They are the last word in incubator building, not a penny being spared anywhere in their construction to make sure of their doing sat-

### Standard Cypher's Incubators

The CYPHERS' INCUBATOR has been known for years as the "business incubator of the age." It has **WON ITS WAY** in all parts of the world because it has given the **BEST RESULTS.** It is used on Government Agricultural Experiment Stations, Large Practical Poultry Plants, Successful Egg Farms, and by thousands of prominent Poultry Fanciers everywhere. It hatches a **LARGE PERCENTAGE** of the eggs entrusted to it, and produces **LARGE, STRONG, HEALTHY** and **VIGOROUS** chicks. It is well known from coast to coast and is probably the "most popular and best known incubator" today.

isfactory work in all climes, under widely different conditions, in the hands of all sorts of people.

**NO. 3—390-400 egg capacity—PRICE \$50.00**

**NO. 2—244 egg capacity—PRICE \$40.00**

**STILL IN BUSINESS.**—It has been told about that the Cyphers Incubator Company is "out of business." The fact is they **reorganized** and are "**still in the ring.**" The reorganization delayed orders, but **we have in stock** about 20 No. 3 large size incubators and a few No. 2, 244-egg.

### Cypher's Electric Incubators

These incubators operate by simply attaching the cord to an ordinary electric light socket. No oil lamps, no smell, can be operated in your home. Handsome finish, neat in appearance.

**NO. 1—60 egg capacity, all complete, \$20.00**



Cypher's Electric Incubator.

### Cypher's Electric Hover

These operate same as the incubators. No worry about filling the lamp. Can be used anywhere with perfect safety. We use them in our windows.

**100 Chick capacity, price \$12.00**

## Two New Books for the Small Poultry Keeper

Issued last spring by the American Poultry Association to help increase and stimulate the production of poultry and eggs. They are right up to date and full of valuable information to any poultry keeper, large or small.

### War-Time Poultry Feeding

Economical poultry and egg production depends largely upon **feed and feeding.** This book is published in an effort to instruct its readers in the **latest and most approved methods**, by well known authorities. 32 pages, 5x7. **Postpaid, 35c.**

### Back-Yard Poultry Feeding

In times like these every nook and corner should be made to produce **something of value.** Poultry lends itself splendidly to production in **limited quarters**, and this book aims to instruct the reader in the **latest and most approved methods.** 72 pages, 5x7. **Postpaid, 65c.**

**SPECIAL**—We will mail one copy of each book for 75c. **SPECIAL.**

**OTHER POULTRY AND PET STOCK BOOKS.**—Our page of up-to-date poultry, bird and pet stock books was crowded out of this catalog. Ask for descriptive leaflet if interested.



## OAKES ECONOMY HOVER

### ALL STEEL, LIGHT, STRONG AND DURABLE

It furnishes plenty of heat with a small lamp flame and is **guaranteed to give satisfaction in every respect**. It is complete in itself and can be used anywhere, without any preparation, other than lighting the lamp.

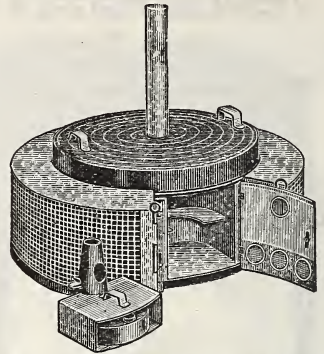
It is made of steel throughout, and all parts are seamed or welded together, strong and durable.

It is compact, light and all in one piece, so that it can be conveniently lifted by the two handles and moved from one place to another without even disturbing the lamp.

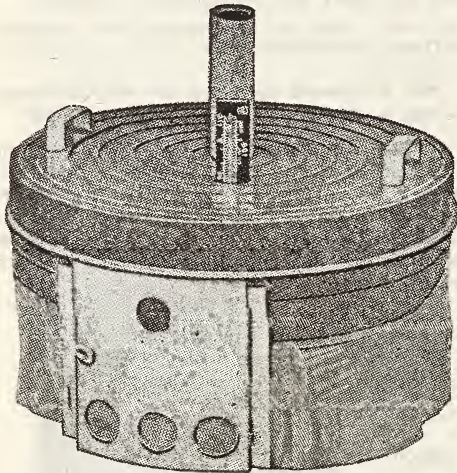
### SAFE, CONVENIENT AND ECONOMICAL

The lamp, lamp slide and lamp box form a very convenient combination, the lamp has an **O. K. Safety Burner**, and the lamp box is **fireproof**.

The Economy Hover can be used anywhere with perfect safety and **ONLY A VERY SMALL FLAME** is required to keep up the temperature as the lamp is inside, and **no heat is lost**. The lamp is held securely in the lamp slide and the slide is an accurate fit in the lamp box, so that no adjustment of the lamp is necessary, simply push the slide in as far as it will go. The curtain is double, and made of heavy ducking and outing flannel. It is attached to the drum of the hover with eyelets and large hooks.



**Economy Hover with rat-proof wire cage; showing construction of lamp, lamp box and lamp slide.**



**Economy Hover without wire cage.**

### ECONOMY WIRE RAT-PROOF CAGE

Thousands of chicks are killed every year by rats—probably half the failures are due to that cause. The wire cage for the Economy Hover, if closed at night, prevents the possibility of any such losses.

The cage is also a great convenience in preventing the chicks from going too far from the hover during the first two or three days. The two halves of the cage are hinged to the lamp box, and can be opened during the day to allow the chicken to run out and in.

With each cage we furnish an extra panel, which closes the opening between the two halves of the cage and makes quite a little yard that is convenient when you do not wish to let the chicks at large.

### PRICE'S ECONOMY HOVERS AND CAGES

- No. 2—100 chick size (22-in. hover)...\$12.00
- No. 1— 50 to 60 chicks (18-in. hover) 8.50
- No. 2—Wire cage, large size..... 3.00
- No. 1—Wire cage, small size..... 2.75

*Gentlemen: Last spring I purchased one of your new Economy Brooder Hovers and I take pleasure in expressing my full satisfaction in the ability of said Hover to raise every healthy chick entrusted to its care.*

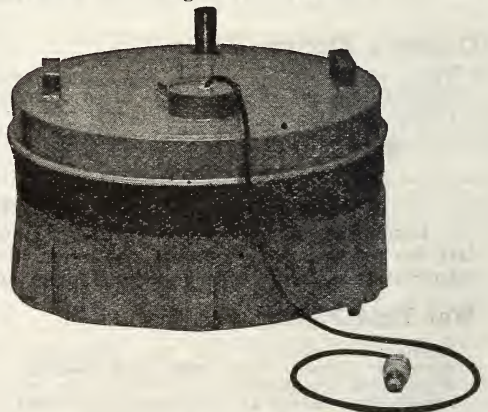
*Out of three broods (147 chicks) not one was sick or died. We never raised a better lot of pullets.*

*Yours truly,*  
**ALBERT HAAS.**

### Oakes Electric Hover

The Oakes Electric Hover is made on the same general principles and of the same high grade material as the Oakes Economy, but as it is lampless there is more room under it. It has a very sensitive and accurate regulator equipped with platinum contact points; heavy double curtain attached with large eyelets and hooks.

The Oakes Electric Hover will give you the best results with the least possible care and trouble. Has many valuable features for the city operator.



**Oakes Electric Hover**

**ELECTRIC NO. 2, 22-inch hover, \$15.50.**

**NOTE.**—Cages described above will fit this hover.

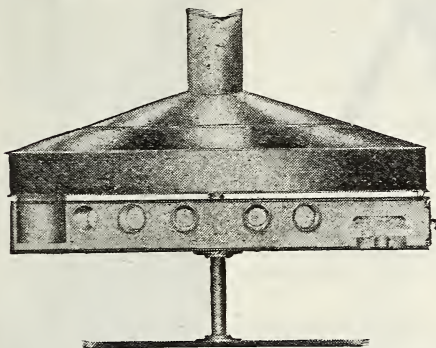
**WE used Oakes Hovers in our store last season and can heartily recommend them as being O. K. IN EVERY WAY.**



## KRESKY'S "PRIDE OF PETALUMA" VENTILATING OIL-BURNING BROODER STOVES

If you want a perfectly reliable, economical and satisfactory oil-burning brooder buy a Kresky. We have sold a great many of these outfits and they gave excellent satisfaction. We can refer you to those who are operating them, if you wish.

If interested, send for descriptive catalog of Kresky's Brooder Stoves. We are sure you will be benefited by Kresky's methods and ideas.



New Liberty 1918, Price \$42.50.

Mt. Angel, Ore., Jan. 1, 1918.

Routledge Seed & Floral Co.,

Gentlemen: The Kresky Oil Burning Brooder Stoves we purchased from you are the finest brooding devices we have ever had or seen used.

After trying them out for two years in competition with several other of the so-called finest brooder stoves, we have discarded everything but the "Kresky" Pride of Petaluma oil burners.

They are easier to operate, more efficient and safer to use than any, from our experience.

The cost of operation is less—consuming two to three gallons of oil (distillate) in twenty-four hours and takes no time whatever.

We used one stove continually day and night from January 15 to July 15, without any trouble or time used, except to fill the oil tank.

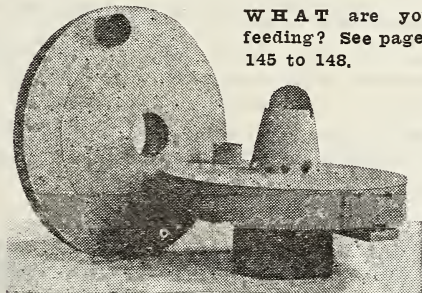
The number of healthy chicks raised with this stove was 30 per cent greater than with the other stoves. We operated four stoves of this type—"Kresky Oil Burner"—and will buy at least one more from you this season.

We thank you for your interest in the welfare of our poultry department.

Yours truly,

MT. ANGEL COLLEGE POULTRY FARM,  
(Signed) Father Boniface, Mgr.

WHAT are you  
feeding? See pages  
145 to 148.



Cone ventilating. Get the idea?

Routledge Seed & Floral Co.

Gentlemen: I am very glad to say that my experience with your "Kresky" room brooder has been very satisfactory. I have used other brooders, but this is the only one which I consider practical.

Note: Mr. Caples raised 1150 chicks at one brooding.

Yours truly,

J. R. CAPLES.



Fresh Air Model No. 12-A

Price \$34.00.

### Kresky and His Brooder Stoves

We have never had the pleasure of meeting Mr. Kresky personally, but we have sold his Brooder Stoves to many of our customers, and so far have not had a complaint; on the contrary, we have only heard praises. We print on this page two "testimonials," as we call them.

We cannot in the limited space on this page give you the details of construction of these wonderful brooders, but we do show you illustrations to give you an idea of what they are like.

NOW—if you are further interested and would like to learn more about the "Pride of Petaluma's" and "Kresky's idea" of the proper method of brooding chicks, drop us a card request and we will mail Kresky's large illustrated and descriptive 24-page catalog.

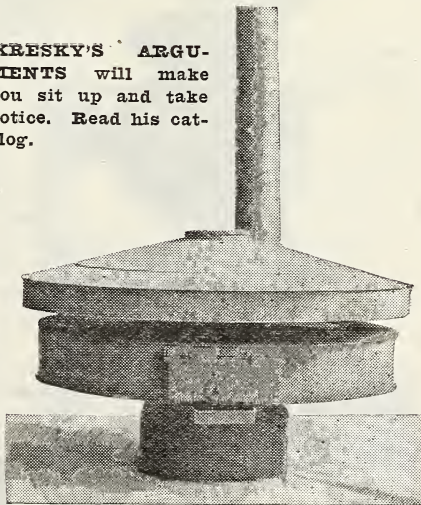
All we ask is that, should you decide to buy one of these outfits, that you don't slip one over on us by ordering direct from Kresky, as we make the same price and have the freight prepaid to your nearest station if you give us time enough.

We have stock at our Portland Store and will gladly show them.

**DON'T WAIT TOO LONG — ORDER EARLY.**

Freights are slow and it will take you a little time to get the outfit set up, so order in plenty of time.

KRESKY'S ARGUMENTS will make you sit up and take notice. Read his catalog.



New 1919 Cone Ventilating. Price \$42.50.

Portland, Ore., Nov. 3, 1917.

Portland, Ore., Nov. 3, 1917. I have used other brooders, but this is the only one which I consider practical.

Yours truly,

J. R. CAPLES.

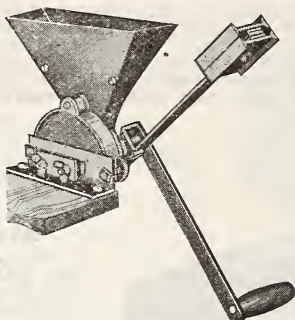


## Ohio General Purpose Mills

A descriptive leaflet giving full information on request.



No. 9 Ohio.



No. 2 Ohio.

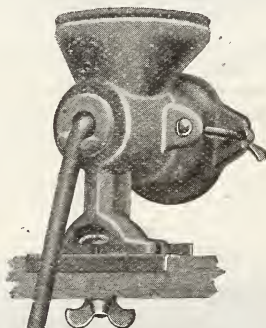
**THE OHIO** mills illustrated on this page are not very large in size, but the capacity is good and you will find them very handy and convenient. As they are made of steel plate, are much lighter than cast.

**NO. 1, 2 and 9** are especially adapted for grinding grain, spurs, coffee, etc., fine or coarse as adjusted, 9-inch hoppers. **PRICES:** **NO. 1**, same as No. 2, without balance (wgt. 9 lbs.) \$3.75. **NO. 2**, see illustration (wgt. 12 lbs.), \$4.25. **NO. 9**, as shown (wgt. 11 lbs.), \$4.75. **NO. 9**, with balance wheel equivalent (wgt. 14 lbs.), \$5.50.

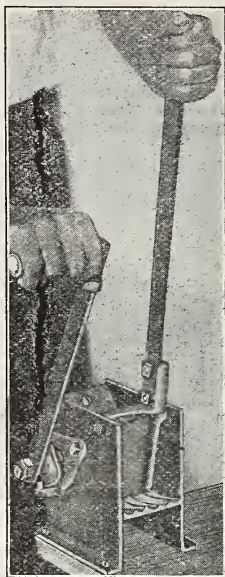
**OHIO NO. 24.**—Fastens to under side of table—make a box hopper as large as you like—great for cutting or splitting corn or wheat. Runs easy, quite rapid. A child can do it. (Wgt. 2 lbs.) Only \$1.50.

**NO. 40.**—New—All steel, no gears. For green bone, table scraps or cracking corn. (Wgt. 13 lbs.) \$9.00.

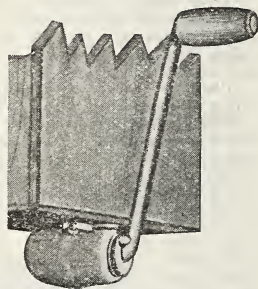
**NO. 27 OHIO.**—A general utility mill for dry, tough, wet, greasy or fibrous materials. A coffee mill of real efficiency. A spice mill of unusual range. A bark and herb grinder of great merit. A nut-butter maker that has never been excelled. Remarkable for variety of work to which suited. Handles the difficult things as well as the simple ones. A country or town home mill.



No. 27 Ohio



No. 40 Green Bone.



No. 24.

Output generally ranges between  $\frac{1}{4}$  and 1 lb. per minute, depending upon speed of operation, kind and condition of material to be ground and degree of fineness to which it is to be ground.

Furnished complete with interchangeable grinding parts, permitting combinations. Offering unequal varieties of work. (Wgt.  $5\frac{1}{2}$  lbs.) **Price \$3.00.**

These interchangeable grinding parts for No. 27 admit of four separate and distinct combinations, making really four mills in one. See parts B, C, L, I.

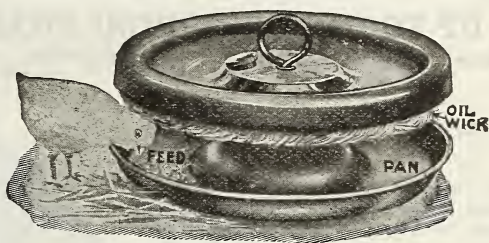


**NOTE.**—We can mail any of the above. Add postage. Descriptive leaflet on request.



## Automatic Chick Greaser

(See illustration)—every chick its own doctor. It is the large lice which collect on the heads of young chicks which cause them to droop and die; and formerly the only way was to catch each chick and rub grease on its head; but this slow and tedious process is not necessary since the invention of the Automatic Chick Greaser. The wick around the upper part of the greaser is saturated with Conkey's Head Lice Ointment or with a mixture of two-thirds lard and one-third kerosene (or black oil) and every chick which eats out of the pan will get its head thoroughly greased in a very few minutes. Can be moved from one pen to another.



Automatic Chick Greaser.

**NEW STYLE.**—Mailing wt. 2 lbs., add postage. Price \$1.25

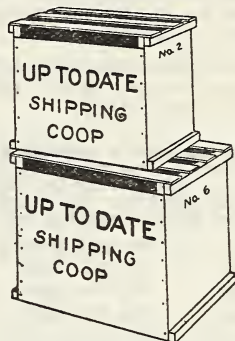
## Up-to-Date Shipping Coops

These coops are really "up-to-date" and will give your customers that impression of you if you use them when shipping. Buyers who pay fancy prices for thoroughbred birds like to see them come in a nice coop—not some old cracker box or oil case. These coops are light but strong. The ends have the cleats nailed on. We ship in the flat to save charges, but it's an easy matter to nail them together, for each part is marked.

Number	Width	Length	Height	Each	Doz.
NO. 2	10½ in.	18 in.	24 in.	60c	\$6.60
NO. 4	10½ in.	24 in.	24 in.	70c	7.75
NO. 6	19½ in.	24 in.	24 in.	85c	9.25

**For Parcel Post**—No. 2 weighs 8 lbs.; No. 4, 9 lbs.; No. 6, 15 lbs.

**Capacity.**—No. 2 suitable for single birds or pair Mediterranean. No. 4 suitable for Asiatic male, American or Mediterranean pair or small trio. No. 6 for a pen of five birds, any variety.



Shipping Coop.

## Grinding Mills

**NO. 32 POULTRY FEED GRINDING MILL.**—In this mill are embodied all the good features of other hand grinding mills to which have been added universal burrs or grinding plates that are quickly adjusted and locked for grinding coarse or fine. This machine will grind any kind of grain or seeds, dry bone, shells, crockery, etc., for poultry feed. Has a 16-inch fly wheel and is light running; the capacity is not equalled by any other of the same size. Weight 40 lbs. Illustrated booklet on request.

Price \$7.50

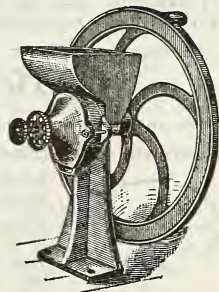
Seaside, Ore., Oct. 10, 1917.

Routledge Seed & Floral Co.,

Gentlemen: Regarding the No. 32 Grinding Mill will say that I am well pleased with it and it sure is a dandy.

Yours truly,

A. BUTIKOFER.



No. 32 Mill—You need one.

We have larger sizes in this mill both for hand and power. If interested, write for booklet and prices.

## Whitewashing and Whitewash

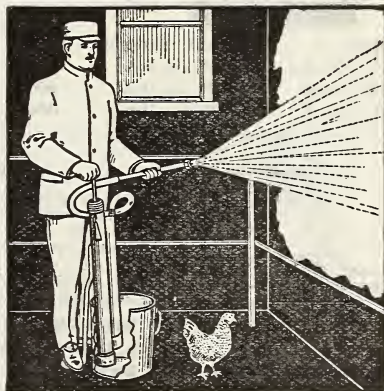
The illustration here shows our No. 28 Whirlwind Sprayer in operation. No. 28 is made especially for whitewashing. See page 127 for price, etc.

**NOW FOR THE WHITEWASH.**—This year we are offering to our good customers a cold water combined whitewash paint and disinfectant, called **Phenola**. It comes in powder form and is mixed with either cold or hot water (full directions on each can). It is so convenient, and so good, that we are sure you will like it. You can either spray it or paint it on.

For use in poultry houses, cellars, stables, fences, walls, tree trunks, etc. See page 125 for prices.

## HAVE YOU TRIED "OCULUM" ON YOUR POULTRY?

It surely is a wonderful preparation from what poultrymen say who have used it. Just think of **DOUBLING THE EGG YIELD**, and only 3 to 5 drops, in feed or water, per bird. See page 148. Pamphlet on request.





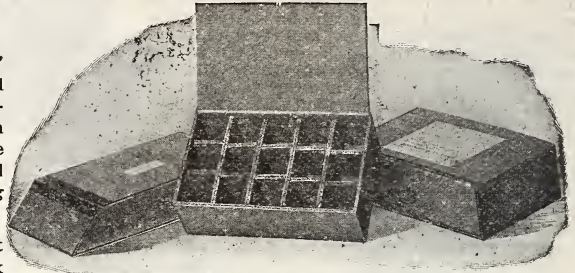
## UP-TO-DATE SHIPPING BOXES FOR HATCHING EGGS

Order early so you will not be disappointed in your delivery. Prices below subject to changes

### UP-TO-DATE EGG CARRIERS

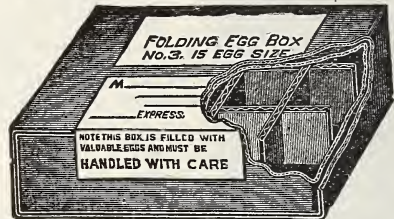
Do not class these "Up-to-Date" boxes with the cheaply constructed egg boxes that are made along similar lines. These are double strength and cushion frame on all sides. Note the illustrations carefully. Safe and reliable for the mailing or expressing of table or hatching eggs.

Note.—Center box open, to the left "slip on" cover, to the right, box closed, ready to ship.



This has been a popular egg box for several years. Note the extra outside "slip-on" cover. A safe box for the expressing of fancy eggs, for hatching. Each egg can be wrapped in paper before dropping into its place.

Size	Weight, Empty	Each	Doz.
15 egg	1 lb. each	30c	\$3.30
30 egg	1½ lbs. each	40c	4.40
50 egg	2¼ lbs. each	50c	5.50



15-egg size. Open corner showing egg cells.

**POSTAGE.**—In ordering above egg or chick boxes by parcel-post be sure you add extra money for postage. Otherwise we will send by express or freight.

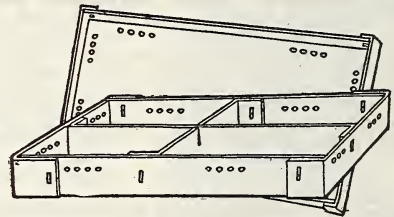
## UP-TO-DATE BABY CHICK BOXES

Well made, properly ventilated.

These insure the safe arrival of your chicks.



Made from the best grade of corrugated card board. Shipped in the flat, but quickly set up by anyone. The use of this box has made long distance express shipments of live baby chicks possible and safe.



100-chick capacity, showing partitions.

Size	Weight Empty	Each	Doz.
25 chick	P. P. 1¼ lbs.	25c	\$2.75
50 chick	P. P. 2¼ lbs.	40c	4.40
100 chick	P. P. 3 lbs.	50c	5.50

Don't wait until your chicks hatch to order your boxes. Order early and be sure of stock when you want it.



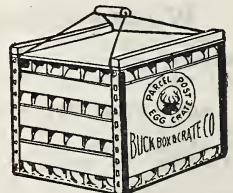
The Ideal  
12 Egg Packer

### Ideal Egg Box

Every poultry keeper who sells eggs should use these folding cardboard egg boxes to deliver egg in. They are folded flat, but the corners are locked, all ready to open up and drop the eggs in. No errors in counting, as each holds just one dozen. Note our low prices for this year.

Price—Per doz. 20c (P. P. 1¼ lbs.); 100 for \$1.10 (P. P. 11 lbs.); 1000, \$9.00.

Extra fillers only, 10c doz.; 75c per 100.



Buck 12 Doz.  
Parcel Post  
Egg Crate

### Buck 12-Dozen Egg Crate

Made of wood, cardboard fillers. Very light, but strong; metal corners; holds 12 dozen eggs; lock wire bale, wooden handle. (P. P. weight 5½ lbs., set up.) Each 60c; doz. \$6.00

**HAVE YOU READ ABOUT OCULUM, PAGE 148? IT'S EASY TO FEED AND WONDERFUL IN RESULTS. MAKES HENS LAY.**



## New "Eggcell" Parcel Post Egg Carrier

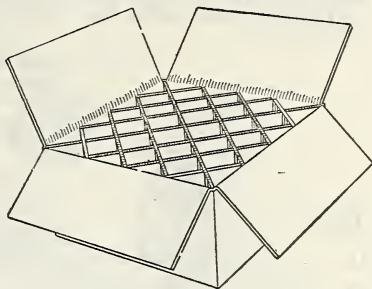
A perfectly safe, inexpensive egg carrier for mailing eggs in for table use

The unique construction of this box affords the maximum protection to the eggs. None of them ever come in contact with the side wall of the box and the diagonal crossing of the divisions prevents the weight of the eggs above from crushing those below. If your eggs are in perfect condition when you pack them, you can rest assured they will arrive at destination without breaking. Owing to the special construction of the box, the length and width is always the same, consequently the flaps form double thickness on top and bottom.

You can now ship eggs by express or parcel post with absolute safety. No more breakage! Note the construction. **Not one egg touches the outer wall.** Protection on every side. Absolutely safe! Made of heavy, corrugated fiber board to stand rough handling and hard knocks. Comes to you knocked down to save space. Nothing like it ever shown before.

If you are not satisfied that it is the best egg carrier that you have ever used, we will return your money. Be sure to send for a sample if you do not order a dozen.

The boxes come complete with instructions for properly packing and sealing.



Carrier capacity	Weight empty	Price, each	Price, Per doz.
1 Doz.	10 lbs. Doz.	\$0.25	\$2.00
2 Doz.	15 lbs. Doz.	.30	2.75
3 Doz.	20 lbs. Doz.	.35	3.50
4 Doz.	25 lbs. Doz.	.45	4.50
6 Doz.	30 lbs. Doz.	.55	5.50
8 Doz.	35 lbs. Doz.	.70	7.00

## EGGS BY MAIL AND ITS ADVANTAGES

Write to your friends in the city, telling them that you furnish new-laid eggs 24 hours old, quote prices, explain your method of marketing by mail, and you will meet with the same success that thousands of other up-to-date people are having who are using this method to dispose of their eggs.

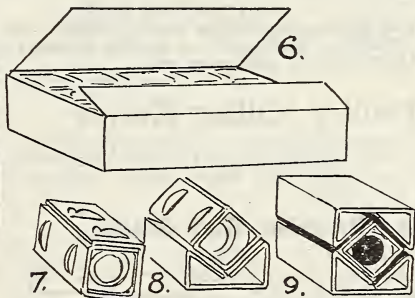
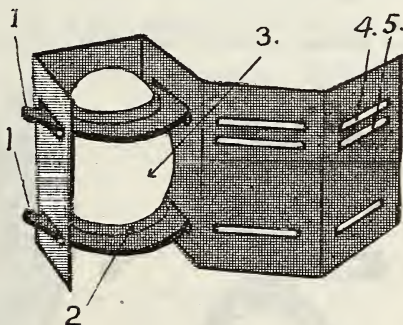
At first sight it would appear that the

cost of our carriers was commercially prohibitive, but when you consider that they are used **over and over again**, the cost becomes a small item of expense. The saving in breakage alone will more than pay for them, even with eggs at 30c per dozen. The Carrier cost is about 1 cent per dozen.

## WALLACE PARCEL POST EGG CARRIERS

Use this carrier and **guarantee your eggs to hatch.** Be up to date and ship your fancy eggs for hatching in the Wallace "cushion frame" egg carrier. Eggs in a Wallace will go to New York and back and hatch perfectly. They **can't jar.** Note the "cushion frame" (No. 9) that holds the individual container (No. 7).

**Single Egg Containers.**—Each egg is packed in a small container (see illustration below) and these small containers are packed in a strong corrugated cardboard carrier. **The result is a perfectly safe egg carrier for parcel post or express.**



**NO. 1**—Lug on discs locks container by slight turn. **NO. 2**—Crimp in discs fits egg snugly all round—by reversing discs a perfect fit for any normal egg, large or small, can be had. **NO. 3**—Showing egg suspended but held firm. **NO. 4**—Disc slot for large eggs. **NO. 5**—Disc slot for small egg.

**NO. 6**—Wallace 15-Egg Box, which is mechanically perfect and the safest carrier for "Fancy Eggs" for hatching. First the eggs are packed in a single egg container (No. 7), and then laid sideways in the cushion-frame holders (see No. 8-9) that fit snugly into the square partitions of the shipping case.

The Wallace "cushion egg frame" packer is the **IDEAL CARRIER** for "Fancy Eggs" for **HATCHING**. **PRICES**, all set up—15-Egg **SIZE** (Wgt. 2½ lbs.), 30c each; \$3.00 doz.

**INDIVIDUAL CONTAINERS** only—Per 100, 75c; 300, \$1.50. (Wgt. per C, 2½ lbs.)

**POSTAGE.**—In ordering above egg boxes by mail or P. P., be sure you add extra money for postage.



## Sanitary Wooden Pigeon Nests

Made of 10-inch, solid square redwood blocks. Sanitary and prevents chilling of eggs or squabs. Cannot tip over. Large enough for any variety of pigeons.

Price, 20c each; \$2.00 doz. (Parcel Post weight, 20 lbs. per doz.)



For Pigeon Food, page 147.  
Pigeon "Salt Cat," page 148.

## The Humane Anti-Hen-Setting Device

(Patented March 13, 1917)

The only device ever invented that will stop a hen setting and cure her of broodiness in twenty-four hours, and do it without the slightest pain or suffering for the hen, and no wasted time or trouble for you.

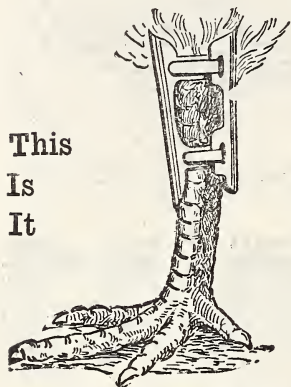
Clasp on leg and let the hen run free for 24 hours, then remove.

### READ WHAT USERS SAY OF IT

"I have investigated and examined your Anti-Setting Device for breaking up setting hens and can see nothing about your method that can be called cruel or that will cause physical pain. I think it the most humane way of treating a setting hen, and you have my consent to use it."—Fred J. Bartles, Humane Agent, Hornell, N. Y.

"I believe it to be the most practical and humane method of preventing hens from setting in use today. It does the trick so quickly and efficiently."

PRICE 15c each; \$1.25 dozen, postpaid



This  
Is  
It



Caponizing Set.

## Caponize

Poultrymen can double their profits by Caponizing the young cockerels. The operation is easily learned. The instructions are so full and explicit that any one, after a careful reading and a little practice, will be able to caponize. It is highly successful from every point of view. The demand for Capons far exceeds the supply, the price per pound being twice as much as for ordinary chicks.

The Same Amount  
Of Feed Will  
Raise Each



The object of caponizing is to largely increase the weight of fowl, causing them, in many cases, to grow as large as turkeys and weighing from 10 to 15 pounds, and to make the meat a fine flavor, very juicy and tender. Caponize the males when they weigh about 1½ lbs. and sell them at 8 to 10 lbs. at a "fancy price."

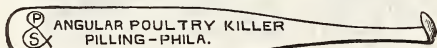
Don't buy a cheap caponizing outfit.

**NEW PHILADELPHIA SET** at \$3.00 is **O. K.** and has many admirers, but we have other sets at \$4.25 and \$5.00. Extra Scoops, Forceps and Knives can also be had. Write or call. Full directions with each set.

## Poultry Killing Knives

You open the fowl's mouth and cut the juglar vein. Hang up by the feet, let them bleed, and pick dry while warm, without using hot water.

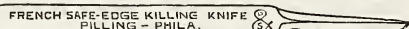
### Pilling's Nickeled, High Grade



#### Angular Killing Knife.

Postpaid 60c

By simply turning the wrist the juglar vein and spinal cord are cut.



#### Safe Edge Killing Knife.

Postpaid 60c

### Robert's

This is a very popular style. Full size, good grip wood handle, highest quality steel blade.

Postpaid 50c



Stearns' Poultry Marker.



## Poultry Markers

Used for marking the web between the toes of baby chicks, if you wish to know different strains or stocks. Colored leg bands are now more popular.

Petter's—(See illustration).  
Stearns—(See illustration).

Postpaid, 25c  
Postpaid, 35c



## LEG BANDS FOR POULTRY AND PIGEONS

Keep a supply of Leg Bands on hand at all times; this is the only safe way to mark your different birds so you can tell certain stock or strains. Of course every bird must be marked with a band before it can be entered in a show.



The most popular numbered band on the market. This brand (see illustration above) is made in one piece and adjustable to fit any fowl. They will stay where you put them. Held by double lock, it is impossible for them to lose off. Made of aluminum with raised figures. Not made for baby chicks or pigeons.

**DIRECTIONS.**—Put small end through loop, draw through until it fits loosely on the leg, turn the end back, then bend the two lugs over the loose end as shown in cut. Cut off surplus with shears.

**READ THIS.**—This is our most popular band and we aim to have a large supply on hand at all times. We have them put up in packages numbered 1 to 12, 13 to 25, 26 to 50, 50 to 100, and boxes 101 to 200, 201 to 300, and in even hundreds up to 1000. **NOTE.—WE DO NOT BREAK THESE PACKAGES.**

**PRICES:** 12 for 20c; 25 for 35c; 50 for 60c; 100 for 80c. Each additional 100, 60c.

## Colored Spirol-Celluloid

See illustration numbered 6.

Have no ends to fasten together—made on the same principle as a key ring. Once put on they stay till taken off and do not chafe the leg. The ease with which these bands are used will be a revelation to the man who has used other style leg bands. And best of all they can be used again and again, without destroying in the least the utility of the band.

**Durable, Practical, Economical.** Provide instant identification without handling the birds. You can identify birds as far as you can distinguish colors, which will tell you the yearling hens and which are older, your different matings, and so on. Fine for baby chicks. **Made in ten colors: Red, White, Pink, Amber, Light and Dark Blue, Black, Purple, Green and Garnet.** Do not fade and weather-proof.

**ORDER BY NUMBER—STATE COLOR WANTED.**

**Order by class. State color wanted.**

Baby Chicks, Pigeons, Mediterraneans, American, Asiatic Hens and Ducks, Asiatic Cocks and Turkeys.

**PRICES,** Any Color or Size.—12 for 20c; 25 for 35c; 50 for 60c; 100, \$1.00.

**Other Popular Brands.**—We will try and sort up to suit you, **BUT** remember to state size or breed.

**NO. 1. LEADER ADJUSTABLE** (see cut). —Has neat, compact and smooth fastening, with no catching points, easily attached and is absolutely secure.

**Prices, postpaid, any size, 12 for 15c, 25 for 30c, 50 for 50c, 100 for 75c.** (State size.)

**NO. 2. CHALLENGE ADJUSTABLE.** — A new light weight, smooth, adjustable band, having embossed or raised numbers which makes them easier to read. (One size adjustable for any breed.)

**Prices same as Leader No. 1**

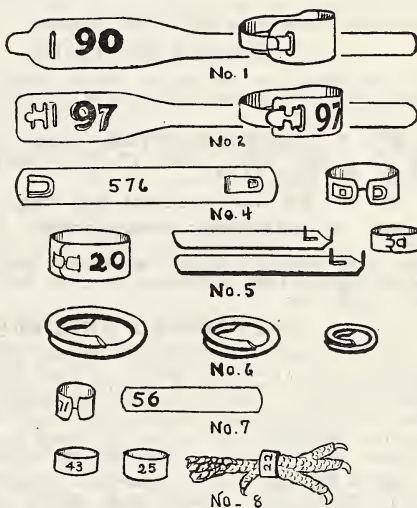
**NO. 7. OPEN PIGEON OR CHICK BANDS.** —Same price as Double Clinch (see cut).

**Read this.**

**WHAT SIZE?**—When you order, tell us size or what kind of birds you want them for and whether male or female. **DON'T FORGET.**

**Read this.**

**THE WORLD'S BEST**



**NO. 4. MOE'S SELF LOCKING LEG BAND.**

—You simply push ends together to lock it and it must be destroyed to remove it. Far superior and much cheaper than the leg bands requiring a sealing tool to seal them. **Same price as Double Clinch.** (State size.)

**NO. 5. DOUBLE CLINCH.** — A desirable band, very safe; no exposed corners, ends or loops; has double fasteners (see cut). Also made in Pigeon sizes.

**Prices postpaid, any size, 12 for 15c, 25 for 30c, 50 for 50c, 100 for 75c.** (State size.)

**NO. 8. SEAMLESS PIGEON OR BABY CHICK BANDS.** **Prices, 12 for 35c, 25 for 70c, 100 for \$2.00.**



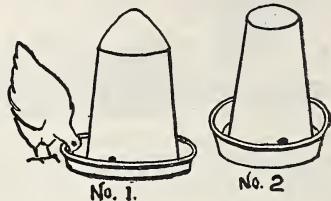
## Up-to-Date Sanitary Drinking Fountains and Feeders

Increase your profits by saving the chicks. Start now by ordering sanitary, economical, up-to-date Fountains and Feeders. Note.—When wanted by parcel post, add postage.

### NO. 1. NO. 2. STANDARD FOUNTAINS

Pressed out of heavy galvanized iron; will last for years. Easy to clean inside and out. (See cut.)

Capacity	P. P. Wgt.	Each	Doz.
1 qt.	1 lb.	40c	\$4.00
2 qt.	1½ lb.	60c	6.00
4 qt.	2 lb.	85c	9.00



### NO. 3. SANITARY STONE FOUNTAINS

An old and popular style that keeps the water cool; see cut. (Not mailable.) Price, 1 qt. 30c, 2 qt. 40c, 4 qt. 60c, 8 qt. \$1.00.

### NO. 4. STAR JAR FOUNTAIN

Very desirable style; chicks can't get wet. Any Mason jar fits it. Price (without jars), each 25c; doz. \$2.50, prepaid.

### NO. 5. PERFECTION FOUNTAIN

This consists of a 6-inch scalloped pan and a collar to fit any size Mason jar. You fill the jar, screw on the collar, slip the pan in and turn it over. Simple, sanitary and perfect for small chicks. Price (without jar), 25c each, \$2.50 per doz., prepaid.

### NO. 6. "O-K" FOUNTAIN FOR FEEDER

(See cut.) Any size Mason jar will fit the collar that is riveted to the 6-inch pan. Very desirable for chick feed, grit, small grain or water. Price (without jars), each 20c; doz. \$2.00, prepaid.

### WALL FOUNTAINS

Very desirable for adult fowls; hang up on the wall out of litter and dirt; made of heavy galvanized iron.

**NO. 7. CYPHER'S STYLE.** Price, each, ½ gal. (P. P. 2 lbs.) 70c; 1 gal. (P. P. 3 lbs.) 90c; 2 gal. (P. P. 3½ lbs.) \$1.25.

**NO. 8.** We have discarded this style.

**NO. 7½ CHAMPION TELESCOPE.** Same general style as No. 7, but the top pulls out. Easy to clean, best wall fountain made. Prices—½ gal. 85c; 1 gal. \$1.15; 2 gal. \$1.50. (Mailing weights, 2¼ lbs., 3½ lbs. and 4 lbs. each.)

### GALVANIZED FEEDERS

Made of galvanized iron; soon pay for themselves in preventing waste. Sanitary, closed top self-feeders for granulated bone, beef scraps, grit, shells, charcoal, dry mash, etc. If these necessary foods are kept before your fowls they will eat just what their systems require for profitable results; in other words, properly balance their rations. Hang up out of the litter.

**NO. 9 Sexton.** Two compartments, one 6 qt. and one 3 qt. (P. P. 4 lbs.), each \$1.25. **Nesto**—two compartments, 2 and 4 qts. (P. P. 3 lbs.), each 90c.

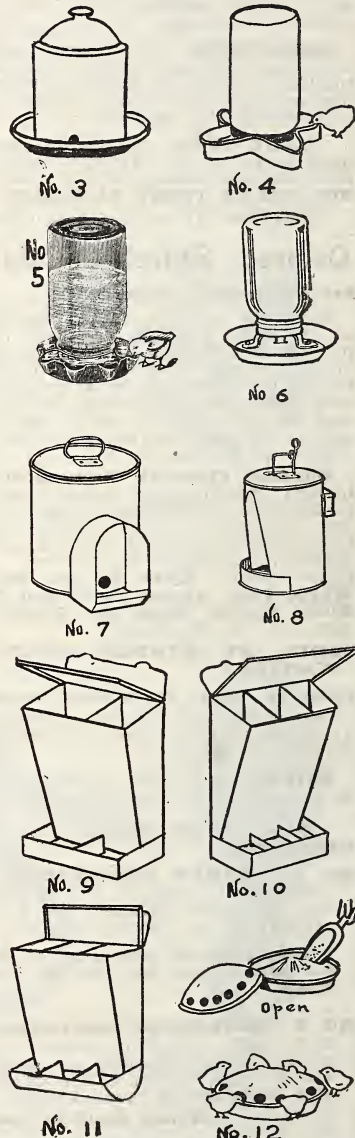
**NO. 10 CHAMPION.** Our standard, leading make. Extra well made, improvement over illustration. Three compartments, holding 2 qts. each, \$1.25; 2 Compartments—3 qt. each, like No. 9, \$1.50; 1 compartment only—6 qt., \$1.75. Figure mailing weight on all at 4 lbs.

**NO. 11 MOE'S.** Extra strong and well made; the feed trough at bottom is round. 3 Section, 2 qts. each (P. P. 4 lbs.), each \$1.50.

**NO. 36 MOE'S DRY MASH HOPPERS.** Made of galvanized, large capacity—18 qts. Properly constructed so it will not clog. Birds cannot waste the feed and at night a trap door makes them rat-proof. (Wgt. 8 lbs.) Each \$2.00.

### NO. 12. MOE'S CHICK SERVER

Practical and a great saver of feed. Chicks cannot get into it. For water or feed. **SMALL** (P. P. weight 2 lbs.), each 30c; **LARGE** (P. P. weight 3 lbs.), each 50c.





## Sanitary Food Holders



Sanitary Food Holders.

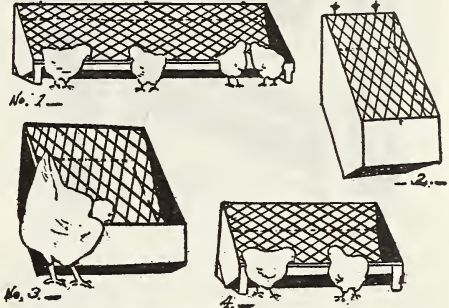
- No. 12 Chick, size 1 x3 $\frac{1}{4}$ x12 inches (P. P. Weight 1 $\frac{1}{4}$  lbs.); Price, each.....\$0.60  
 No. 18 Medium, size 1 $\frac{3}{4}$ x4 x18 inches (P. P. Weight 2 lbs.); Price, each..... .75  
 No. 30 Extra Large, size 3 x6 x30 inches (P. P. Weight 4 lbs.); Price, each..... 1.50

**For Poultry and Ducks of All Ages.**—They are especially recommended for use in feeding mashies of any kind; steamed or dry alfalfa or sprouted grain. This protected receptacle saves 15 to 25 per cent in foodstuff. The topguard that keeps the fowls out of the feed is removable from the pan, making them very easy to clean. There is nothing to get out of order. Made of heavy galvanized iron; safe, sanitary, saving and serviceable.

## Boston Dry Food Hoppers

We believe this Food Hopper to be the best device of the kind on sale for the use of thrifty, up-to-date poultry raisers. With this device fowls cannot waste food, yet food is always accessible and always in sight. It cannot clog, is easily refilled when empty, and easy to clean and keep clean. During the day the front screen is dropped down against the feed, at night lifted up and hooked to keep the rats out. (See cut.) Insures your chickens clean food entirely free from filth of any kind. Every poultryman will appreciate this feeder. Made of heavy galvanized iron; with care will last forever.

See Cut No.	Capacity	Size	P. P. Wt.	Each
No. 3 Large	$\frac{1}{2}$ Bu.	17x8x13	7 lbs.	\$1.25
No. 2 Medium	1 Pk.	17x8x 7	6 lbs.	1.00
No. 4 Short	$\frac{1}{2}$ Pk.	15x8x 4 $\frac{1}{2}$	4 lbs.	1.00
No. 1 Long	1 Pk.	29x8x 4 $\frac{1}{2}$	5 lbs.	1.50



Boston Food Hoppers

## Wire Hen Nests

These nests are strongly made from coppered wire with reinforced coppered steel ribs. They fasten to the wall with screws or screw hooks; they are easy to keep clean; are far superior to boxes. (P. P. wghts.: Each, 1 lb.; doz., 8 lbs.)

Price: Each, 25c; per doz., \$2.25

"OCULUM"—Great dope—see page 148

## "Kan't Klog" Feeder and Exerciser

One of the best combined feeders and exercisers. **Cannot clog.** No spring to get out of order. Swinging deflector scatters the grain all around, a little at a time, whenever the birds pick at the grain bait cup. Holds enough to be of real service. Can be set to feed little or much. Hang in the scratching pen with straw on the floor.

- No. 29 Capacity 10 qts., each.....\$3.00  
 No. 31 6 qts., for low houses, each..... 2.25

## Oakes Hydro Safety Lamps

Made especially for incubators and brooders. They have a water jacket to keep oil and burner cool and are perfectly safe, economical and satisfactory in every way.

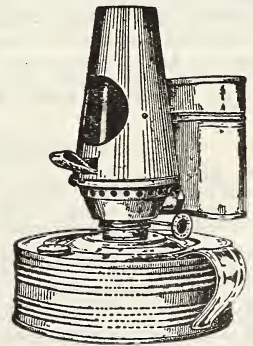
- No. 1—7 $\frac{1}{2}$  in. high;  $\frac{5}{8}$  in. wick (P. P. 1 $\frac{1}{2}$  lbs.) .....\$1.25  
 No. 2—8 in. high; 1 in. wick (P. P. 2 lbs.) 1.75  
 No. 3—9 in. high; 1 $\frac{1}{2}$  in. wick (P. P. 3 lbs.) ..... 2.00



Kant Klog Feeder.

## Feed Your Chickens Buttermilk

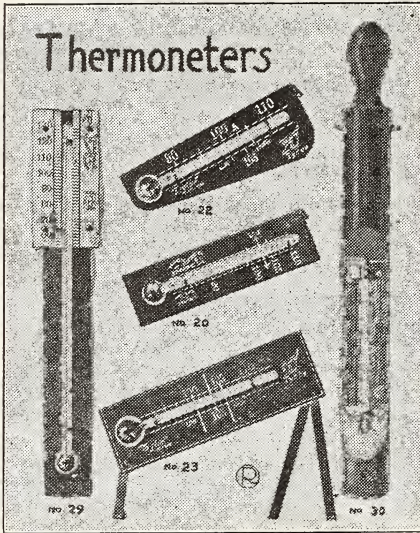
At last we have found a satisfactory article called "LACTEIN." It is condensed buttermilk and you use 1 gallon of it to 30 gallons of water, or it can be mixed into the dry mash. See page 145 for full information.



Oake's Safety Lamps

**DAD'S ELECTRIC LANTERNS**—Every poultry keeper needs one. It's always ready—no danger of fire, makes a **REAL LIGHT**. See page 122.





Without a reliable, accurate thermometer an incubator is practically worthless. Hundreds of hatches fail every year because of inferior thermometers and large numbers of brooder chicks are destroyed for the same reason.

We sell the "Tyco's" tested, recognized as the most dependable.

#### FOR INCUBATORS

**NO. 22 "TYCO'S."**—Very popular. Generally suspended on string or wire on level with eggs. (Cypher's style.) Postpaid 85c; wire hanger 10c extra.

**NO. 22 $\frac{1}{2}$  MODEL.**—Same shape as No. 22 but not of as high grade finish. Postpaid 75c.

**NO. 24 PERFECT.**—Similar in shape to the No. 22 except that the mercury bulb extends below the metal to allow the bulb to rest on the eggs. High grade. Postpaid 75c.

**TYCO'S CERTIFIED.**—Same style as No. 22. Scale is etched on glass tube as well as metal back. "Certified correct," worth the price. Postpaid \$1.25.

**NO. 20.**—Tested, for incubators, used in Queen incubators. Postpaid \$1.00.

Buckeye Incubator Thermometer, \$1.00.

**NO. 23 TYCO'S.**—Similar to No. 20, with folding legs, adjustable; to be set up in egg tray. Postpaid \$1.00; Model, same style, 75c.

#### FOR BROODERS

**NO. 29.**—New style and most convenient; temperature readable from above the hover. Used in Economy, Cypher's and Buckeye Brooders. Postpaid, each 75c.

**NO. 30.**—For Cypher's Hovers. Portable, 60c; Adaptable, 60c.

No. 30. Postpaid 50c.

**NO. 31.**—Same style as No. 30. Postpaid 50c.

**NO. 5120.**—For general use or for the brooder house. Red mercury. Scaled from 10 below zero to 120 above. Metal face, wood back. 8 inches. Price \$1.25

## Nest Eggs

LIME &amp;

MEDICATED

NEST

EGGS

**NEW MEDICATED.**—Answers as a nest egg, also an insecticide. Helps to keep lice out of the nests and off the laying or setting hen. Non-breakable.

Each 10c; 3 for 25c; 12 for 85c; (Wgt. 2½ lbs. per doz.) Add postage.

**LIME NEST EGG.**—Better than China eggs; non-breakable. More natural.

Each 5c; 3 for 10c; 12 for 40c. (Wgt. 2 lbs. per doz.) Add postage.

## Incubator Hygrometers

"Moisture Indicators"

Millions of chicks die in the shell every year, for the want of proper moisture conditions. The importance of a correct percentage of moisture during incubation has made the "Tyco's" Incubator Hygrometer as necessary as the "Tyco's" Incubator Thermometer. Neither takes the place of the other, but together they give the practical poultry raiser all the facts required for successfully regulating the heat and moisture of the incubator. Descriptive pamphlet on request.

**Hygrometer, with full instructions, postpaid**

\$1.50; with Tyco's "Certified" \$1.25 Incubator Thermometer; both postpaid \$2.50.

Extra wicks, 15c each.

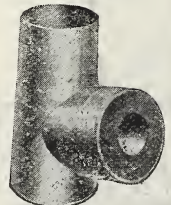


Tyco's Hygrometer.

## X-Ray Egg Tester

Used to test fertility of eggs during first week of incubation. Use on an ordinary lamp (No. 2 burner) in a dark room. It will illuminate interior of egg so that you will know if the chick is alive. Also shows size of air-cell.

Price, postpaid, 60c



X-Ray.

**NOTE.**—We keep in stock miscellaneous extra parts for Cypher's and Queen Incubators and Brooders. Ask for price of parts wanted.





Makes Hens Lay

# LACTEIN

## Condensed Buttermilk



Makes Hogs Pay

**Lactein** is a scientific product produced under perfect sanitary conditions from fresh buttermilk and whey at the creameries, cheese and casein factories of California.

**Lactein is buttermilk and whey without the water.**

Lactein retains all the health-giving values and a uniform acidity without the useless bulk of water encountered in either whey or buttermilk and will keep pure and fresh under any condition or in any climate for any length of time.

**Lactic Acid is a tonic.**

For years the greatest poultry experts in the world have recognized the value of sour milk as a food tonic—a regulator for poultry, but when they have undertaken to use raw buttermilk have run up against objections which more than offset the many advantages for its use in poultry feeding. In the main these objections were the excessive cost, inconvenience, trouble and expense of handling and the poor keeping qualities. Lactein eliminates every objection to the use of raw buttermilk and reduces the cost to a mere trifle.

### For Poultry

It will positively increase the egg production from 10 to 30 per cent.

It will make your flock healthy and vigorous.

It will prevent the many distressing diseases known to poultry.

It will cut your losses 90 per cent in baby chicks.

It will aid digestion, improve the appetite and increase assimilation.

Any chicken raiser who will feed **Lactein** as directed for 30 days will thereafter never be without it.

It is real buttermilk super-soured and condensed, and when used as directed, we guarantee results or return what you have paid.

**DIRECTIONS FOR FEEDING:** First 10 days, 5 tablespoons to a gallon or 1 gallon to 50 gallons of water; later 1 to 40 and 1 to 30. Full instruction on each container.

**PRICES:** 50 Gal., \$31.20; 5 Gal., \$4.00; 1 Gal., \$1.25. Delivery charge to depot: Bbl., \$1.50; 5 Gal., 50c. Ask for large Descriptive Folder.

**CITY TRADE** can get **QTS. FOR 40c** if they bring a fruit jar.

### For Pigs and Hogs

It will keep the hogs strong and healthy.

It not only keeps the digestive tract free from putrifying bacteria, but it promotes the growth of acid-forming bacteria and maintains a normal digestion, thereby making disease impossible.

It is of great value as a muscle and bone builder, and especially for young pigs and brood sows.

It is high in Lactic Acid, the best appetizing agent known.

## Conkey's Buttermilk, Meat, Bone and Grain Mash



This new buttermilk mash for hens and grown poultry comes to us highly recommended by the G. E. Conkey Co., who know what a real first-class buttermilk mash

should contain. This is just the food our poultry raisers have wanted for several years and we are sure it will give profitable results. It's made of **nothing but pure sweet grains with plenty of meat, bone and buttermilk.** It will get the eggs when nothing else will.

Prices: 5 lbs., 40c; 10 lbs., 75c; 50 lbs., \$3.25; 100 lbs., \$6.00. Write for quantity price.

### Conkey's Buttermilk Starting Food

**Buttermilk your baby chicks and make them grow like weeds.**

Put vim and vigor into them when they most need it; help them throw off disease and withstand exposure.

Conkey's Buttermilk Starting Food provides buttermilk for the chicks in a dry, sanitary mash form. It makes a regular, uniform supply possible, and in addition to this it contains sweet, pure grains and just enough medication to start the organs working in a normal way. It is a nourishing, stamina-building food that makes the youngsters husky and strong. It should be their very first food. Feed dry.

Prices, 5 lbs. 50c; 12 lbs. \$1.00; 50 lbs. \$3.50; 100 lbs. \$6.75.

Mt. Angel, Ore., January 3, 1918.

Routledge Seed & Floral Co.,  
Portland, Oregon.

Gentlemen: In reply to your inquiry as to the merits of Conkey's Buttermilk Mash Starting Food, will say we are more than pleased with the results obtained from its use.

We have raised more chicks, healthier chicks and better chicks than ever before by using "Conkey's Buttermilk Mash Starting Food." It has reduced the sickness to a minimum.

Yours truly,

MT. ANGEL COLLEGE POULTRY FARM,  
By Father Boniface, Mgr.



## Routledge's "Highest Quality" Poultry Foods

Don't invite diseases and loss by using old pans, open dishes or wooden troughs. See page 142.



The poultryman who feeds the "Highest Quality" poultry foods, even though it is a little higher in price, makes more profit than he who is content with cheap mixtures or low grade grains because it costs less.

The demand for our poultry foods is enormous among the poultry raisers, for they have found out that we supply only highest quality foods. They also appreciate the fact that we give them wholesale prices. We have no dealers to protect.

**NEW PRICES.**—We now make store or warehouse prices and ask dray or delivery charges. This is fair to all, **THEREFORE WE ASK YOU TO ADD 25c extra for the first 100 lbs. and 10c more for each additional 100 lbs., for delivery to depot or boats. CITY DELIVERY CHARGES ON REQUEST.**

### FISH MEAL—H. Q.

The grade we sell is the best obtainable, it contains nothing but pure fresh fish properly processed and will not taint the eggs. Fish Meal is rapidly taking the place of Beef Scraps, Beef and Meat Meal, Blood Meal, etc., as it contains more available animal protein.

**Prices, 5 lbs. 40c; 10 lbs. 75c; 50 lbs. \$2.75; 100 lbs. \$5.25; 500 lbs. @ \$5.15.**

### BEEF SCRAPS

Our "Highest Quality" beef scraps are rich in materials which make bone, muscle and lean meat. They insure health, thrift and vigor, and satisfy the natural craving of the bird's system for flesh-food in some form. Rich in protein. Can be fed dry or with cooked rations. Don't waste any, feed in one section of Sanitary Feeder. See page 142.

**Price, 1 lb. 10c; 5 lbs. 50c; 10 lbs. 75c; 50 lbs. \$3.35; 100 lbs. \$6.40.**

### GRANULATED BONE—"SPECIAL"

We offer only highest quality, white, pure and clean. Rich in phosphates, lime and protein. Should be kept before your chickens at all times. Feed in a Sanitary Shell and Grit Box. (See page 142.)

**Price, 5 lbs. 25c; 12 lbs. 50c; 100 lbs. \$3.75; 500 lbs @ \$3.65.**

**STANDARD.**—Good but not so white. 100 lbs. \$3.65; 500 lbs. @ \$3.55.

### CLOVER OR ALFALFA MEAL

The best substitute for green food for winter feeding; helps keep the egg basket full; mixed with the soft feed is good for large or small chicks; endorsed by leading experts.

**Price, 1 lb. 10c; 10 lbs. 50c; 100 lbs. \$2.75.**

### CHARCOAL

Our stock is prepared especially for poultry; no dust; a preventive of bowel trouble, sour crop and indigestion; a health preserver. State size wanted. **A** for mash, **B** for chicks, **C** for large chickens or hens. **Price, 1 lb. 10c; 3 lbs. 25c; 10 lbs. 75c; 50 lbs. \$2.60; 100 lbs. \$4.25.**

### POULTRY PEPPER

A good tonic and invigorator. Ground. **Price, 1 lb. 30c; 5 lbs. \$1.25**

**GRINDING MILLS.**—Every poultry keeper should have a good mill for bone, grit, grains, etc. See pages 136-137.

### OYSTER SHELL, CRUSHED

This is pure hard oyster shell crushed and sifted; supplies the lime material for egg shells. Oyster shells should be within reach of your hens at all times. **Price, 4 lbs. 10c; 12 lbs. 25c; 100 lbs. \$1.75 500 lbs. @ \$1.65.**

### GRIT—Best Grade

Every poultry raiser should keep a supply of this grit in each pen. **Baby chicks and ducklings must have it.** Made in three sizes chick, pigeon or broiler and hen size. We always send hen size unless otherwise ordered.

**Price, 5 lbs. 10c; 14 lbs. 25c; 100 lbs. \$1.20; 500 lbs @ \$1.15; 1,000 lbs. @ \$1.05.**

Milwaukie, Ore.

Routledge Seed & Floral Co.

Gentlemen: In discussing the question of chick feeds with breeders, I find that most of them stop the small feed too early, as a chick's gizzard cannot properly prepare the larger feeds for assimilation until about four months of age.

**WE FIND OUR "REDS" DEVELOP FASTER ON FISHER'S CHICK FEED THAN ANY OTHER PREPARED CHICK FOOD WE HAVE YET TRIED AND CAN HEARTILY RECOMMEND IT.** We used it largely in developing our show birds, and our phenomenal winners are proof of its success.

Sincerely yours,

NLS-RA DR. N. L. SMITH.  
Breeder S. C. Rhode Island Reds.

### POULTRY MUSTARD

Ground fine. 1 lb. 25c; 6 lbs. \$1.20

## Spratt's Cooked Foods

FOR PHEASANTS, CHICKENS AND TURKEYS

**Spratt says:** "Our experience of over 50 years in the poultry, game and dog-food business convinces us that a **predigested cooked food**, the basic ingredients of which is **wheat and meat**, solves the problem successfully." It promotes health, strength and vigor. This food, after being cooked and baked, is reground into 3 sizes:

**NO. 12—Pinhead size for baby chicks.**

**NO. 5—Rice grain size, chicks over 3 weeks.**

**NO. 3—Split pea size, adult birds.**

In ordering be sure and state size wanted.

**PRICES—1 lb. 15c; 5 lbs. 70c; 10 lbs. \$1.30; 50 lbs. \$5.75; 100 lbs. \$10.50. Write for quantity prices. Postage extra.**

**IMPORTANT NOTICE TO POULTRY KEEPER.**—We want your trade direct—not the dealer's, therefore give you strictly wholesale prices in 5, 10 and 20-bag lots. Ask for latest prices when ready to buy. Get your neighbor to order with you so as to secure the quantity prices, the saving will pay the freight charges in many cases. **PRICES ON THIS PAGE SUBJECT TO IMPORTANT MARKET CHANGES.**

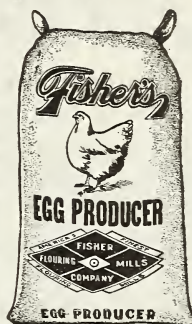


## FISHER'S PURE FOODS FOR POULTRY

A TRIAL WILL CONVINCE YOU OF THEIR SUPERIORITY OVER THE MUCH ADVERTISED "LOCAL BRANDS."



Two years ago we took up the sale of the Fisher's Flouring Mills Co. line of Poultry Foods, because we decided that the **Fisher's Foods** were the best that money and experience could produce. Our sales are still increasing and thousands of our customers now agree with us that **Fisher's Poultry Foods** are **unequaled in quality and always the same**. Prices change but the formulas **never** and you can always depend on getting **full value**. We claim they are the **cheapest** because the most profitable. We are in a position to quote very low prices and supply promptly in any quantity these **pure high grade foods**.



**NEW PRICES.**—Prices given below are **NOT DELIVERED**. .Read paragraph top of page 146.

### FISHER'S CHICK STARTER

The critical time in the life of a chick is the first few weeks. Until chicks are thirty-six hours old they should be given **nothing but water and fine grits**. Many play havoc with their broods by feeding them immediately. **Avoid this fatal error**. Fisher's Chick Starter contains food ingredients necessary to promote quick, rugged growth. You will find it a perfect food for the first four weeks. Make them scratch for it and keep Fisher's "Developing Mash" or Conkey's "Buttermilk Mash." **Dry**, in a feeder before them at all times.

Prices, 4 lbs. 25c; 9 lbs. 50c; 100 lbs. \$4.60; 500 lbs. @ \$4.50; 1,000 lbs. @ \$4.40.

### FISHER'S CHICK FOOD

This is a preparation of steel cut, pure, wholesome grains, carefully and scientifically combined. A month or two on this diet will bring remarkable results in the rounding out of the body and the development of a superb coat of feathers. Every element that goes into Fisher's Chick Food counts heavily in the building of the fowl. **There is no waste**.

Prices, 4 lbs. 25c; 9 lbs. 50c; 100 lbs. \$4.60; 500 lbs. @ \$4.50; 1,000 lbs. @ \$4.40.

**NOTE.**—See testimonial opposite page.

### FISHER'S DEVELOPING MASH

There is no better known food ration for growing strong, sturdy and active chicks quickly, either for layers or for the show pen. It is a bone, tissue and feather producing ration of **known merit**. It should be fed after chicks are six or seven days old and kept continually before them until they are fully matured. (Feed it in a dry food hopper.) See pages 142-143.

Prices, 5 lbs. 25c; 10 lbs. 50c; 100 lbs. \$3.75; 500 lbs. @ \$3.70; 1,000 lbs. @ \$3.60.

### FISHER'S GROWING FOOD

This meets the wants of the growing chicks from the time they are six to eight weeks of age until ready for scratch food. It contains the **nutritive elements necessary for the rapid building of tissue** and if fed Developing Mash will bring about the quickest possible development.

Prices, 4 lbs. 25c; 9 lbs. 50c; 100 lbs. \$4.60; 500 lbs. @ \$4.50; 1,000 lbs. @ \$4.40.

### FISHER'S FATTENING MASH

Prepared expressly to meet the wants of the fancier who lacks weight in his show birds or the grower desiring to quickly fatten and finish young or old stock for the market. It will quickly add weight to a mature or growing fowl.

Prices, 5 lbs. 25c; 10 lbs. 50c; 100 lbs. \$4.00; 500 lbs. @ \$3.90; 1,000 lbs. @ \$3.80.

### FISHER'S SCRATCH FOOD

This is a perfectly balanced ration which, when fed with Fisher's Egg Producer for laying hens or Fisher's Developing Mash for maturing youngsters, contains all the food elements required to obtain the **very best results** known to scientific poultrymen. In its preparation only the purest and choicest grains are used. **Experienced Poultry recognize it as the best scratch food the market supplies.**

Prices, 4 lbs. 25c; 9 lbs. 50c; 100 lbs. \$4.25; 500 lbs. @ \$4.10; 1,000 lbs. @ \$4.00.

### FISHER'S EGG PRODUCER

A mash mixture containing **all the ingredients necessary to the matured laying hen**; very rich in protein. It renders unnecessary the feeding of blood meal, beef scraps, etc. The rapidly increasing demand for Fisher's Egg Producer **proves its real money making value**. Results will prove this the most economical mash on the market.

Prices, 5 lbs. 25c; 10 lbs. 50c; 100 lbs. \$3.75; 500 lbs. @ \$3.65; 1,000 lbs. @ \$3.55.

### FISHER'S PIGEON FOOD

In compounding a food for pigeons, the proper selection of various grains is of great importance, especially so during the breeding season and when squabs are to be marketed. The health of the birds and the weight of the squabs are dependent upon correct feeding.

Fisher's Pigeon Food is the most reliable and satisfactory mixture of the best grains obtainable for this purpose. It is practically impossible for any feeder to purchase on the open market materials of this kind and quality and assemble them at a price as low as ours.

Prices, 4 lbs. 25c; 9 lbs. 50c; 50 lbs. \$2.60; 100 lbs. \$4.50. Write for quantity price.

We make special prices direct to Poultry Raisers. 5 bags assorted foods at 500-lb. prices; 50 lb. sacks 25c extra. Prices subject TO IMPORTANT MARKET CHANGES. Write for quantity price when ready to buy. **WE'LL SAVE YOU MONEY.** Read about delivery charge top of page 146.



## OCULUM, A WONDERFUL SCIENTIFIC GERMICIDE

Ask for Pamphlets giving full information and testimonials

### Oculum Liquid For Poultry

"OCULUM" is not a stimulant but is a SCIENTIFIC GERMICIDE. It destroys disease germs in the bowel and keeps fowls healthy.

#### DIRECTIONS FOR FEEDING.

Use one drop of "OCULUM" a day to each grown fowl (or 10 drops to each pound of feed). A teaspoon holds 60 drops.

Mix the "OCULUM" with water (just enough to sprinkle) and sprinkle the feed with the mixture, stir it and cover it up and the "OCULUM" will penetrate the feed in thirty minutes. "OCULUM" mixes with feed wet or dry, whole or cracked grain. It mixes best with scratch feeds.

"OCULUM" may be successfully used in water, put 5 drops to the quart of water daily for 30 days as a tonic.

You can feed "OCULUM" treated feed with PERFECT SAFETY to any size fowl, from a day old chick up. Use "OCULUM" feed ONLY ONCE A DAY, all the fowls will eat. Feed "OCULUM" DAILY for ONE MONTH and then stop for one month and so on.

**PRICES:** Trial size, 1 oz. (240 feeds), 15c; 50c bottles, 60c and \$1.00 bottles, \$1.10 postpaid; by Express, Pints, \$2.00; Quarts, \$4.00; Gal., \$10.00.

For Stock and Poultry Insecticides Remedies, Tonics, etc., see Conkey's, page 149.

### Oculum Oil For Stock

**STOCKMEN ARE DELIGHTED WITH ITS QUICK AND CERTAIN ACTION AND REASONABLE COST**

Sick hogs and sick sheep quickly relieved by its magic power. Sick horses and sick cattle made well again by its use. Feed bills reduced.

"Oculum Oil" is a scientific germicide for animals. Used in feed, it kills germs and worms in the organs of animals. Makes meat.

#### DIRECTIONS.

**For Health and Extra Flesh:** Feed hogs, sheep, goats, and other small animals 3 drops "Oculum Oil" once a day in the feed to each 100 lbs. live weight; feed horses, cattle and other large animals 5 drops once a day in the feed to each 100 lbs. live weight. Feed it 4 weeks at a time, then rest 4 weeks and so on.

**For Sick Animals.** Inject "Oculum Oil" in the anus, and also feed the sick animal "Oculum Oil" according to directions with each bottle.

**We Guarantee Oculum Oil to Save Feed and Make More and Better Meat or Money Back.** Full directions with each order.

**PRICES:** Trial size, 60c, or Half Pint \$1.15 postpaid; by Express, Pints, \$1.50; Quarts, \$2.50; Gal., \$7.50.

**SPECIAL SYRINGE FOR ANIMALS, 25c.**



## HOGAN'S BOOK "The Call of the Hen" HOGAN'S BOOK

### DON'T KILL THE LAYER—SWAT THE DRONE

Why feed the hen that never lays or that never lays enough eggs to pay her keep? There is a way to prevent this. Learn which of your hens lay best.

#### THIS BOOK WILL TEACH YOU HOW

But once in a century is a discovery made which revolutionizes an industry, adding to the sum of human knowledge a "missing link" in the chain of civilization—creating an exact science, where before chaos reigned supreme,—where things went sort of hit and miss fashion. What Edison has done with electricity, what Burbank has accomplished in the field of horticulture, Walter Hogan has done for the poultry industry. So that you can understand and apply to your own poultry work the result of all this, the full details in plain and terse language is given in his new one hundred and fifty page cloth bound book.

Under the touch of his magic hand Nature's secrets stand revealed—secrets, the value of which cannot be estimated in dollars and cents—secrets which have enabled hundreds of thousands of poultrymen to double profits in a single year.

#### IT WILL CUT DOWN YOUR FEED BILL

If you only keep a dozen hens you need this book. It will cut down the feed bill and increase your average egg yield. Don't judge "The Call of the Hen" by other poultry books. It's a cloth bound illustrated description of a new discovery, revolutionary in nature, the result of a lifetime of investigating and experimenting and has been thoroughly tested by hundreds of the most successful poultry plants and pronounced wonderful and sure.

#### Cull Your Flock Now—Sell the Loafers—Keep the Workers

By the Hogan method you can not only select your good layers, but also good breeders, both male and female; birds that will reproduce their kind and enable you to rapidly increase the average egg production of your flock.

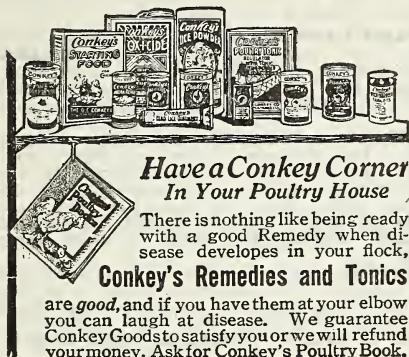
**PRICE:** \$2.00, postpaid. You take no chance. Examine the book and if not satisfied return it for your money.



## CONKEY'S GUARANTEED POULTRY REMEDIES

**READ THIS.**—We handle 2 to 3 carloads a year of these celebrated remedies which have built their reputation upon the scientific basis of one remedy for each disease.

A "Cure All" is not made by the Conkey Company. Each remedy is intended to serve one special purpose and serve it well. These goods are **absolutely guaranteed**, and we offer them to you on this basis. **If they fail to satisfy you in any particular, your money will be refunded to you cheerfully.** Conkey's Descriptive Book free on request.



### Have a Conkey Corner In Your Poultry House

There is nothing like being ready with a good Remedy when disease develops in your flock.

### Conkey's Remedies and Tonics

are good, and if you have them at your elbow you can laugh at disease. We guarantee Conkey Goods to satisfy you or we will refund your money. Ask for Conkey's Poultry Book.

**POSTAGE.**—The following can be mailed safely but **ADD 5c EACH FOR POSTAGE** and safe packing on the 30c packages and 10c extra on the 60c to \$1.20.

Roup Remedy (powder)	30c, 60c and \$1.20
Roup Pills, Special.	30c and 60c
Canker Special Remedy.	60c
Bronchitis Remedy.	60c
Blackhead Remedy.	60c
Cholera Remedy.	30c and 60c
Gape Remedy.	30c and 60c
Lice Fix (Salve Form).	30c and 60c
Limber Neck Remedy.	60c
Scaly Leg Remedy	30c
Rheumatic Remedy.	60c
Poultry Laxative.	30c
Poultry Conditioner (General Tonic).	30c
Poultry Worm Remedy.	50c
Poultry Flea Salve.	30c
Sulphur Candles.	15c; 6 for 80c
White Diarrhoea Remedy.	Save your baby chicks by putting it in their drinking water.
	Price 30c and 60c

For **CONKEY'S BUTTERMILK STARTING FOOD** for baby chicks and **MASH** for hens, see page 145.

## Conkey's Guaranteed Stock Remedies

**CONKEY'S 224-PAGE STOCK BOOK FREE.**—It's full of the most practical information relative to the raising and keeping of livestock. Housing and feeding problems, diseases—how to recognize them and how to treat them—are all explained. Every dairyman, every stockman, every farmer, should have this book. Get your copy. Free if you call at our store, or send 5c in stamps to cover postage.

**Stock Tonic.**—Tones up their system, gives heat and strength; money well spent. For horses, cows, sheep and hogs. **Prices (not prepaid):** 1/2 lbs., 30c; 3 lbs., 60c; 7 lbs., \$1.20; 12-lb. pails, \$2.25, and 25-lb pails, \$3.75. Mailing weights given, add postage.

**Worm Remedy.**—Guaranteed. 60c postpaid.  
**Colic Remedy.**—Just a few drops on the tongue; effective. 60c; postpaid 70c.

**Healing Powder.**—For gall sores, cuts or wounds; excellent. 30c or 35c postpaid.

**Gall Salve.** 30c; postage 10c extra.

**Pain Lotion.**—For swellings, etc. (P. P. 2 lbs.) 60c.

**CONKEY'S NOXICIDE.**—Absolutely unequalled as a non-poisonous deodorant and germ destroyer. Every pet stock fancier needs this. Dilute in water 1 to 20 or 1 to 50 according to directions and use as a spray or wash. Kills germs and prevents diseases. Kills fleas on dogs and lice on poultry or pet stock. Can also be used for cholera, roup, cankers, pip, flue, etc. **Good for human or stock.** Once used, always wanted. **Prices:** Fints, 50c; Quarts, 75c; 1/2 Gal., \$1.25; 1 Gal., \$2.00.

**NOTE.**—We can send pints (P. P. wgt. 1 1/2 lbs.), and quarts (P. P. wgt. 3 lbs.), by parcel post if you send **postage at weights given** and 10c extra for safe boxing.

**CONKEY'S HEAD LICE OINTMENT.**—Save your little chicks from the ravages of the deadly head lice. Absolutely harmless to the little chicks. Put up in tubes. Easy to apply. **Price 15c and 30c; postage 5c extra.**

**CONKEY'S LICE POWDER.**—It is positive death to lice, ticks, etc. Equally effective for lice on setting hens and young chicks. **Gets them all.** Cleans up the coop. Absolutely harmless to even the smallest chick. Easy to apply and does the business or your money back. Get a package today. **Prices (not prepaid):** 7-oz. pkg., 15c; 1/4-lb., pkg., 30c; 3/2-lb., 60c; 14-lb. pail, \$1.60; 30-lb. pail, \$3.00. **Note.**—Weights given are wrapped; if wanted by parcel post add postage.

**CONKEY'S LICE LIQUID.**—A powerful liquid that will destroy the thousands of red mites that live in the cracks and crevices of the house and nests in the day and swarm the fowls' bodies at night. You can't reach them with a powder. Paint or spray the roosts, nests and walls. **Prices:** 1-qt. can, 60c; 2 qts., 90c; 1 gal. \$1.50; 5 gal., \$7.00.

**CONKEY'S POULTRY TONIC.**—It insures the maximum egg production both summer and winter. Guaranteed to give results or money back. **Prices (not postpaid):** 2 lbs. 30c; 4 lbs. 60c; 14-lb. pail, \$1.60; 30-lb. pail, \$3.00. **NOTE.**—Add postage if wanted by mail. Weights given are wrapped.

**Bag Ointment.** 30c and 60c; postage 10c.

**Dip and Disinfectant.**—Best sheep and hog dip made. **Quart, 75c; 1/2 gal. \$1.25; gal. \$2.00; 5 gals. \$9.50.**

**FLY KNOCKER.**—Best fly spray made to keep flies off of horses or cows. **Your money back if not satisfied.** Qt., 75c; 2 qts. \$1.25; gal. \$2.00; 5 gals. \$9.50.

**COW SPECIAL.**—Every dairyman should keep this on hand; fully guaranteed. **Prices:** 60c can postpaid 70c; \$1.20 can 3 lbs. wrapped; add postage.

**LIQUIDS BY PARCEL POST.**—We can send by parcel post pint and quart cans of Lice Liquid, Noxicide, Sheep Dip and Fly Knockers, but it must be packed safely. We ask 10c extra to cover this cost and also postage. **PLEASE REMEMBER.**



## SONG AND CAGE BIRDS

We are the largest importers and dealers in Birds and Gold Fish in the Northwest. This department of our business has grown rapidly and we now carry large and complete stocks of cages, supplies and foods and all birds in their season.



We Guarantee Our Singers.

### Canary Birds

Note.—Do not compare our prices with the irresponsible bird fakers, who sell for little prices and supply inferior stock and females for males, etc.

**AMERICAN BRED CANARIES.** Healthy, hardy, well-shaped birds, fine singers; all colors. **MALES, Young Stock, August to November 1st, \$3.00 each; after November 1st—Ordinary birds, \$3.50; Selected Singers, \$5.00 up. FEMALES—\$1.00; selected deep yellow, \$2.00.**

**HARTZ MOUNTAIN ROLLERS.** Beautiful, shapely birds. Lovely, free singers, hardy and thrive anywhere. Their cheery song is like sunshine to the soul; their bright plumage, active ways and cheerful dispositions make them the favorites and most popular. **MALES, \$5.00 each; extra selected singers, \$7.50 to \$10.00. FEMALES, \$1.00 to \$1.50 each; selected, \$2.00.**

**ST. ANDREASBERG.** These are world-renowned and the sweetest singers. No imported stock to be had now on account of the war, but we offer home raised birds from imported parents that will please you. **MALES \$15.00 to \$25.00. FEMALES, \$2.00 to \$3.00.**

Silberton, Oregon, April 3, 1918.

Routledge Seed & Floral Co.,

Gentlemen: I am very much pleased with my bird. He is a fine singer and sings better every day.

Yours very truly,

MRS. S. J. COOLEY.

Coeur d'Alene, Idaho, April 5, 1918.

Routledge Seed & Floral Co.,

Dear Sirs: We received our bird in good time and in good condition and wish to thank you for same. The bird is a very nice one.

Yours truly,

BURTON WARNER.

Warren, Oregon, February 1, 1918.

Routledge Seed & Floral Co.,

Gentlemen: Thank you for taking such care shipping the Java Rice Bird. It arrived in the best condition and is smooth as silk in spite of the cold weather.

You have left nothing to complain about in our dealings with your firm.

J. I. WELLBORN.

### Other Favorite Cage Birds

We do not always have all of the following birds on hand, but can get them quickly on orders. For further information, write.

	Each	Pair
Japanese Robins .....	\$5.00	\$8.50
European Gold Finch .....	4.00	7.50
Chestnut Finch .....	2.00	3.50
Zebra Finch .....	4.00	7.50
Bull Finch .....	5.00	
Society and Strawberry Finch.	3.00	5.00

### White Java Rice Birds

One of the handsomest of all aviary birds. A little larger in size than the average canary. Color pure white and of such solid, smooth appearance that it looks like a piece of statuary. Beak tinged with dark red toward the base. Attracts more attention in our store than any other bird. **Each, \$5.00; pair, \$8.50.**

### Paroquets

**YELLOW SHELL PAROQUETS.** Very rare, plumage a beautiful opal yellow, lovable pets. **Each, \$5.00; pair, \$8.50.**

**AUSTRALIAN SHELL PAROQUETS.** Often called Lovebirds, look like a miniature parrot, a little larger than a canary, plumage green, very intelligent and beautiful. **Each, \$5.00; pair, \$7.50.**

### CANARY BIRD "SPECIALS"

These Four Articles Have Merit, We Sell Gross After Gross

**BIRD MANNA.**—A combination of seeds, herbs and roots that nature intended birds should have. Food and medicine combined. A tonic and conditioner. Comes in half-round cakes. Fastens on the cage wires. **Per cake, 15c, postpaid 20c; 2 for 35c.**

**BIRD-O-LINE.**—A preparation very similar to "Manna," except that it is granulated and dry and is fed in the seed cups, a little at a time. **Per box, 20c, postpaid 25c; 2 for 40c.**

**CANARY HIGH BALLS.**—Another article of above merits. Highly praised. Comes in ball form and hangs in the cage. "Mr. Bird" eats it as he needs it. **Each, 15c; 2 for 25c; postpaid 20c; 2 for 35c.**

**SPRATT'S COD LIVER OIL CAGE BIRD FOOD.**—A food for young birds and birds in the moult. Takes the place of boiled eggs for young birds and brings as good if not better results. **Per pkg. 25c; postpaid 30c, 2 for 50c.**



**LIVING PRESENTS**—Did you ever stop and consider what a desirable Christmas or birthday present a beautiful CANARY makes? They are so different, interesting and desirable, SO CHEERFUL AND LOVABLE.



## ROUTLEDGE SEED & FLORAL CO.'S BIRD FOODS

### "H. Q." Stands for "Highest Quality"

We are making a specialty of Bird Foods and Remedies and carry in stock the largest and only complete line in the Northwest. Our rapidly increasing trade shows that the public appreciates the opportunity to get "High Quality" foods and remedies of "Merit" for their pets.

NOTE.—Add postage to all prices (not marked prepaid), if wanted by mail.

#### ROUTLEDGE SEED & FLORAL CO.'S

**H. Q. IMPORTED BIRD SEED.**—Our own special mixture for American, Hartz Mountain and St. Andreasberg Canaries; especially prepared for the singers. Contains no hemp, but the correct proportions of highest quality re-cleaned Canary, Sweet Rape, small Golden Millet and a few other seeds to give health and "pep" to the singers.

It is no wonder that thousands of canaries die annually from the effects of common Bird Seeds bought from grocery and drug stores, which is so often old, musty, dirty, inferior seeds, incorrectly mixed.

Try a package of our H. Q. and note the difference and also the saving, even though it is a little higher in price.

**"H. Q." sold only in sealed 1-lb. cartons** (see illustration of our 1-lb. carton). Take no other. **Price 40c lb.**

Add postage if wanted by mail.

**H. Q. Hemp Seed.**—Hemp is the large, round, dark-grey seeds found in all cheap mixtures. It is very heating and fattening and should be fed sparingly and not to singers at all. **Price 20c lb.**

**H. Q. Canary.**—Recent war conditions have made Sicily canary seed very scarce and higher than usually. **45c lb.**

**H. Q. Millet.**—Small golden, soft shell. **20c lb.**

**H. Q. Imported Sweet Rape.** **25c lb.** Easily detected by the sweet taste. Beware of wild mustard, kale and turnip seeds sold as bird rape.

**Lettuce Seed, for birds.** **25c lb.**

**Bird Sand, silver, washed. 2½-lb. cartons, 15c**

**"H. Q." Bird Gravel.** A new product becoming very popular with bird fanciers. **2 lb. can 20c.**

NOTE.—Add postage to all foods above when ordering by mail.

### Parrot Foods, Tonic, Etc.

**H. Q. Mixed Parrot Seeds.**—This is our own mixture of clean, well cured sunflower, hemp, pumpkin and corn, properly mixed. Your "Polly" will like this. **25c lb.; 3 lbs. for 70c; postage extra.**

**H. Q. Sunflower.**—We offer only large, plump, full meated seed properly cured and of the right age for health. Far superior to the average stock sold. **20c lb.; 5 lbs. for 85c; postage extra.**

**Parrot Corn.**—Best quality for parrots. **15c lb.; 4 lbs. for 60c; postage extra.**

**M. G. Parrot Spray.**—Will cure Parrots of the habit of biting off their feathers. **Per bottle 50c; postpaid 65c.**

**M. G. Mixed Parrot Seed.**—Properly mixed for good health and plumage. Full and valuable directions on the care of Parrots on each box. **Per carton 25c; postpaid 35c.**

**M. G. Prepared Corn, for Parrots.**—To be given in addition to the seed. **Per carton 20c; postpaid 25c.**



This is our H. Q. Bird Seed Carton—Highest quality seed obtainable. (Green box, yellow bird.)

**Red Bird Gravel (P).** Preferred by many of our customers. Small pkg., 2 lbs., **20c**

**Cuttle Bone, high grade, large size. Each 10c, or 2 for 15c, postpaid; with patent fasteners or holders, 10c and 15c, postpaid.**

**M. G. Parrot Biscuit, for old and young, to keep them in good health and plumage. Per carton 25c; postpaid 35c.**

**Parrot Biscuits (P).** A high grade food. **Per box 45c; postpaid 55c.**

**M. G. Parrot Tonic.**—Unexcelled for young Parrots, cures catarrh, etc. **Per bottle 25c; postpaid 35c.**

**M. G. "Health Food" for Parrots, for health and fine feathers. Per carton 25c; postpaid 35c.**

**Parrot Diarrhoea Cure (K).**—A cure for diarrhoea or bloody flux. **40c, postpaid 50c.**

**Parrot High Balls (K).**—A breath and condition food. **Each 25c, postpaid 30c.**

**Reliable Parrot Remedy (K).**—For sickly parrots, loss of appetite, etc. **50c, postpaid 60c.**

**Parrot Tablets.**—For Polly when out of condition. Excellent. **30c, postpaid 40c.**



## Miscellaneous Bird Foods and Remedies

We have used in our own Bird Stock Department the following remedies, all of which we can recommend. We buy them in one to five-gross lots and aim to have complete stock at all times.

To conserve space, we will designate the different stocks as follows: (G) for **Max Geisler**, (K) for **Kaempfers**, (P) for **Philadelphia Bird Co.'s**.

**NOTE.**—The following prices are all postpaid, 5c less per package if called for. Prices subject to market changes.

### SONG AND MOULTING FOODS

Always feed some of the following foods during moulting season and to restore the songs. Feed a "general tonic" when moult first starts, followed by a **Song Restorer**, which should bring your bird back into full song quickly.

	Price, Postpaid
<b>Song Restorer</b> (K), large size.	50c
<b>Excelsior Song Restorer</b> (K)	25c
<b>Drahota's Song Restorer</b> (P).	30c
<b>Song and Moulting Foods</b> (G).	30c
<b>Song Restorer</b> (Spratt's).	30c

The following are liquids:

<b>Treatment A.</b> —( <b>Song Restorer</b> ) (G).	35c
<b>Treatment B.</b> —( <b>Digestive Trouble.</b> ) (G)	
For diarrhoea and bowel disorder.	35c
<b>Treatment C.</b> —( <b>Cold Cure</b> ) (G).	35c
<b>Treatment D.</b> —( <b>General Tonic</b> ) (G). Use	
once a week in drinking water.	35c
<b>General Tonics.</b> —See "Bird Specials," page 150.	

**MOCKING BIRD GOODS.**—An excellent and highly nutritious prepared food, made for **Mocking Birds**, **Robins**, **Thrushes** and all soft-billed birds. **DEFIANCE**, large cans, 75c; **RUHE'S**, 1-lb., cans, 60c; **GEISLER'S**,  $\frac{3}{4}$ -lb., 50c.

**Bird Biscuit** (G), for change of diet. 25c

### MITE AND LICE POWDERS.

Watch out for **lice** on the birds and the little **red mites** that hide in the crevices of the cage or walk during the day and live on the birds at night. Your bird cannot be contented and happy with these pests.

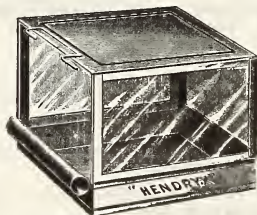
**H. Q. Bird Cage Wash.**—A liquid to be diluted with water for disinfecting the cage and killing the mites. Full instructions on the label. 35c, postpaid 40c.

**Mite Powders** (P), large box, 40c.

**H. Q. Insect Powders.**—Very effective; 15c.

**Note.**—We have small insect powder blowers at 25c each postpaid. You need one to apply powder effectively. (See page 128.)

	Price, Postpaid
<b>Asthma Tablets</b> (K).	30c
<b>Diarrhoea Tablets</b> (K).	30c
<b>Constipation Tablets</b> (K).	30c
<b>Bird Bitters</b> (P), general tonic.	40c
<b>Vegetable Extra</b> (G), general tonic.	35c
<b>Moulting Pepper</b> (P) moulting season.	35c
<b>Nesting Food</b> (P), for young birds.	35c
<b>Nesting Hair</b> (P), for nests	15c
<b>Plumage Restorer</b> (K), gives color.	30c
<b>Foot Ointment</b> (K), for sore feet.	30c
<b>Bird Liniment</b> (K), for scaly legs.	30c
<b>Color Food</b> (P), gives the feathers better color. Fine for young birds or after moulting.	40c



Glass Bath House

### Glass Bird Bath House

Ideal in every way. Finished in white enamel and gold trimmed. The removable glass sides can be easily cleaned. To prepare the bath, fill the bottom with warm water, open the cage door and hook bath house before it. "His Majesty" can go in and take his bath when he pleases and you lose no time standing around awaiting his pleasure. With this closed bath room the bird cannot scatter the water. (For bathing dishes, see page 155.)

Price 50c; postpaid 60c

### Make Money Raising Canaries

While the American-raised canaries do not bring the high prices of the imported stock, nevertheless there is good profit in them, and a steadily increasing demand. It is an interesting and profitable pastime. We have valuable instructive books as follows. Prices postpaid:

### Valuable and Up-to-Date Books on Birds

Canary Breeding and Training.....	35c	Feathered Pets, 140 pages.....	35c
Canary Keeping, 80 pages.....	75c	Parrots and Talking Birds .....	40c

**CANARY BREEDING STOCK.**—We make a specialty of canaries and can supply you strong, healthy male or female birds that we will guarantee to mate.



## PARROTS

We handle more young parrots than all other Northwestern dealers combined. The young parrots arrive during July and August, but we aim to have stock on hand at all times. Price of **trained talkers** on request. We offer hand raised, not the wild, trapped, unmanageable birds.

**PANAMA PARROT.**—The most popular parrot with our trade. Of quite large size, gentle disposition, easily taught and become great favorites. Deep green plumage. They often show a yellow spot on the back of the head. **Young, 6 to 8 months old, each \$20 to \$25.00; extra select, \$35.00; Old Parrots. Trained Talkers, \$35.00 to \$50.00 and up.**

**CUBAN PARROT.**—Medium size, green plumage, red tips on winks, light face, gentle, fine pets, good talkers. **Note below.**

**MEXICAN RED-HEADED PARROTS.**—Medium size, trim and active, make fair talkers, gentle. Green plumage, bright red on head, blue in wing and tail.

**NOTE.**—Cubans and Mexican Parrots are cheaper in price than Panamas. They were not to be had last year, but may be obtainable this year. Write for prices.

### BB OR DWARF PARROTS

These cute little parrots make great pets. They are active, bright and wideawake. They are not much on the talk, but can be trained. Their dark green plumage is always smooth and pretty. Their gentle disposition and winning ways make them great favorites. **Each, \$5.00 to \$10.00.**



Panama Parrot.

## Parrot Cages

These are extra strong, large and roomy, well finished and of the latest and best designs of Parrot Cages on the market. **OUR SPECIAL CAGE CATALOG** will show larger cuts of the three styles.

### MOULDING BASE SQUARE CAGES

Made of extra heavy tinned wire, new style moulding base, with removable cleaning drawer, and also has wire grating to keep bird from getting down on dirt. Tinned iron, self-locking feed cups.

No.	Size	Height	Price
101	15 $\frac{3}{8}$ x 14 in.	27 in.	\$12.00
102	17 $\frac{3}{8}$ x 15 $\frac{3}{8}$ in.	28 in.	13.90
103	21 $\frac{1}{4}$ x 17 $\frac{1}{2}$ in.	31 in.	16.80

### ROUND PARROT CAGES

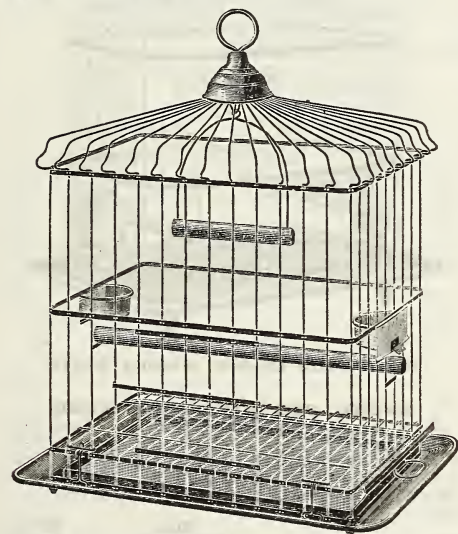
These are very popular on account of the low prices. Our advice is to get the largest cage you can afford, as it gives "Polly" more room for exercise and less danger of spoiling the tail feathers. Heavy tinned wire, strong and well made; zinc bases, self-locking feed cups.

No.	Diameter	Height	Price
No. 50	13 in.	19 $\frac{3}{4}$ in.	\$4.65
No. 55	14 in.	21 in.	5.60
No. 60	15 $\frac{1}{2}$ in.	23 in.	7.20
No. 65	17 $\frac{1}{2}$ in.	28 in.	10.00

### PARROT STANDS

After your parrot has become tame and well trained, a parrot stand is very desirable. It gives more freedom and the bird greatly enjoys it, and can keep his plumage in much better condition. Keep Polly chained when you leave.

**No. 1**—Finished in black enamel. Complete with feed cups, tray and chain. Good heavy base, so it will not tip over. Tray adjustable to any height. **Price \$10.00.**



Moulding Base Nos 101 to 103.

### PANCY SQUARE CAGES

Made of extra heavy tinned wire, zinc base, strong self-locking feed cups. They also have a slide cleaning pan on the bottom and wire grating to keep bird from getting down on the dirt.

No.	Size	Height	Price
115	16 $\frac{3}{8}$ x 11 $\frac{1}{2}$ in.	23 in.	\$10.75
120	17 $\frac{1}{2}$ x 14 in.	25 in.	13.00

**PARROT FOODS**—You must remember that your parrot does not get all the foods nature intended it should have, therefore give "Polly" a treat by feeding our Health Food, Parrot Biscuits, Etc. See page 151.



## CANARY BIRD CAGES

We believe we carry the most complete line of plain and fancy cages on this coast. Limited space in this catalog will not permit us to illustrate all, but if further interested send for our **SPECIAL CAGE CATALOG**. We offer herewith some of our most popular and best sellers. Prices subject to change in metals.

### LA FAVORITE BRASS CAGES

This is one of the new, late models; very popular and one of our best sellers. The full, graceful design at the top adds greatly to its general appearance. Handsome, bright finish, extra well made. (Wgt. packed 7 lbs.) See illustration.

No.	Size, Inches	With Guard	Without Guard
7004 ...	9 $\frac{5}{8}$ x6 $\frac{1}{2}$ x12 $\frac{3}{4}$	\$5.15	\$3.25
7006 ...	10 $\frac{1}{8}$ x7 $\frac{1}{8}$ x13 $\frac{1}{4}$	6.15	3.90
7008 ...	10 $\frac{3}{4}$ x7 $\frac{3}{4}$ x13 $\frac{1}{2}$	7.00	4.80
7010 ...	13 x8 $\frac{1}{2}$ x14 $\frac{3}{4}$	8.00	5.35

### IDEAL BRASS CAGES

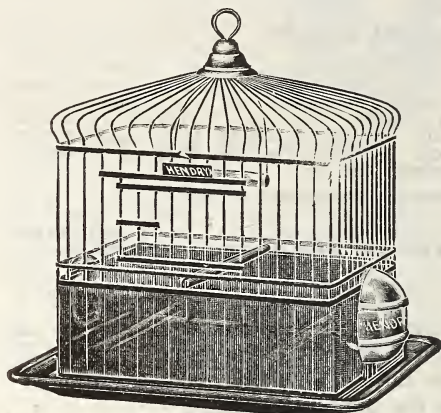
The best low priced, brass wire, cage on the market; cheap in price only. Made of the best spring brass wire, well fastened, no cheap solder to break. About the same build as La Favorite. (Wgt., packed, 7 lbs.) See illustration.

No.	Size, Inches	With Guard	Without Guard
5004 ...	9 $\frac{5}{8}$ x6 $\frac{1}{2}$ x11 $\frac{3}{4}$	\$4.85	\$3.25
5006 ...	10 $\frac{1}{8}$ x7 $\frac{1}{8}$ x12 $\frac{1}{4}$	5.40	3.75
5008 ...	10 $\frac{3}{4}$ x7 $\frac{3}{4}$ x12 $\frac{1}{2}$	6.15	4.50
5010 ...	13 x8 $\frac{1}{2}$ x14 $\frac{3}{4}$	7.50	5.60

### SNOW-WHITE ENAMELED CAGES

Well made and properly finished so that the enamel will not chip off. Color, pure white. It is impossible to find better value in a low-priced cage. A person often has use for a second cage for young birds or perhaps an extra one, and these are just the thing. (Wgt., packed, 7 lbs.) See illustration.

No.	Size, Inches	With Guard	Without Guard
30 .....	8 $\frac{3}{4}$ x5 $\frac{3}{4}$		\$1.80
31 .....	9 $\frac{1}{4}$ x6 $\frac{3}{8}$		2.15
32 .....	9 $\frac{3}{8}$ x6 $\frac{7}{8}$	\$3.85	2.45
33 .....	10 $\frac{1}{2}$ x7 $\frac{1}{2}$	4.30	2.75
34 .....	11 $\frac{1}{8}$ x8 $\frac{1}{8}$	4.80	3.00
35 .....	11 $\frac{3}{4}$ x8 $\frac{3}{4}$	5.20	3.35



La Favorite, with Seed Guards



Snow-White Enamel, without Guard

### ROUND BEE HIVE—ENAMELED

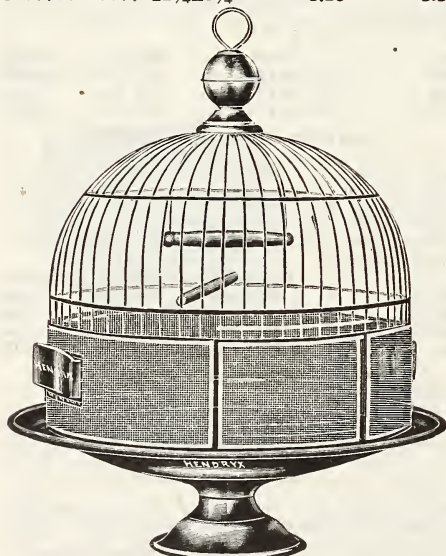
This new style white enameled cage is a great seller. It is well made, strong and durable. Desirable for either stand or hanging bracket. Prices complete with brass guard (see illustration). (Wgt., packed, 7 lbs.)

No.	Size Diameter	With Guard
W88 Enamel .....	10 inches	\$4.80
C 88 Enamel .....	10 $\frac{1}{2}$ inches	5.65
L 88 Enamel .....	11 inches	6.45

### ROUND BEE HIVE—ALL BRASS

A very popular cage. All polished brass, large and roomy. (Wgt., packed, 7 lbs.)

No.	Size Diameter	With Guard
W8 Brass .....	10 inches	\$7.20
S 8 Brass .....	10 $\frac{1}{2}$ inches	8.20
L 8 Brass .....	11 inches	8.65



Round Bee-Hive Style

**Note.**—(P. P. wgt. 8 lbs.) means parcel post weight packed ready to mail, but all cages will be sent by express, which is safest, unless ordered by parcel post and extra money sent for postage in addition to 35c to cover cost of box and packing.



## Canary Bird Cages and Extras—Continued

### CANARY BREEDING CAGES

Enameled, all complete, nests, etc. No. 4 Single, 17x9x13 inches, \$4.80. No. 3 Double, 19x10x14 inches, \$6.10. No. 2 Double, 22x11x16 inches, \$6.75. No. 1 Double, 25x12x16 inches, \$8.30. No. 113 Double, \$7.80.

### BIRD CUPS

Postage 5c Extra

Style 1904—Opal or Plain..... 15c  
Style 1902—Plain Glass..... 15c  
Style 1916—New Style Square Opal..... 20c  
Breeding Cage Cups, Glass 15c, postpaid 20c  
Breeding Cage Cup, No. 113 20c, postpaid 25c

### BIRD BATH HOUSE

No. 1911—(see pg. 152)..... 60c, postpaid 70c

### BATH DISH

Opal or Plain. Glass..... 20c, postpaid 25c

### CAGE HOOKS OR WALL BRACKETS

Postage 5c Extra

**Dandy.**—Heavy wire, nickle-plated, swinging style; 8-in., 30c; 10-in., 40c; 12-in., 50c. Swinging style, brass, 8-in., 45c; 10-in., 50c; 12-in., 60c.

**Acme.**—Cast solid arm, fancy design, brass plated, swinging, 12-inch. \$1.00 postpaid.

### CAGE SUSPENSION SPRINGS

No. 16, single, 20c; No. 14, heavy, 25c.

### BIRD NESTS

Willow, 25c; wire, 20c.

Nestinghair, 15c pkg.; 2 for 25c.

Our Bird Cage Catalog shows illustrations of all cages and extras.

## Cavies—Guinea Pigs

Bright, active and harmless pets. They are in much demand and money can be made raising them. They come in combination colors of brown, white, yellow, black and tan, generally spotted and prettily marked. Solid colors are not always obtainable and are higher in price.

**ENGLISH.**—Smooth, short hair; hardy and healthy. Young, Females \$1.00, Males 50c to 75c; Old, Females \$1.50, Males 75c to \$1.00. A select breeding pair, \$2.50.

**ANGORA.**—Long, soft hair; 50c more than above.

**ABYSSINIAN.**—Quite rare. Hair is peculiarly twisted or turfed into what might be called rosettes. 50c more than English.



**BOOK**  
on  
**CAVIES,**  
care and  
manage-  
ment,  
25c p'pd.

English Cavy (Guinea Pig).

## Rabbit Foods, Remedies, Supplies

### Rabbit Foods and Remedies

All tried and tested, of real merit. Full directions on each package.

Slobber Remedy.—Sure cure. 35c  
Ear Canker Remedy.—Sore ears. 35c  
Sore Hook Remedy. 35c  
Vent Remedy.—Very valuable. 35c  
Diarrhoea Remedy. 35c  
Snuffle Remedy.—Colds, etc. 75c

**Rabbit Tonic—Condition Powder.**—Prevents disease, tones up the system and keeps stock healthy. 1 teaspoonful to 10 lbs. grain or mash. 50c pkg., postpaid, 55c; \$1.00 pkg., \$1.10, postpaid.

**Buck Tonic.**—Keeps the males in vigorous, healthy condition. 75c pkgs., postpaid, 85c.  
**Disinfectant.**—Use Conkey's Noxicide. See page 149.

### ROUTLEDGE RABBIT FEED

This is a mixture of grains, rolled and ground, that should be fed in addition to alfalfa or clover hay and green vegetables and roots. Price, 5 lbs. 30c, 10 lbs. 50c, 2-bu. sack \$3.50.

### Ideal Feed and Water Dishes

Made especially for rabbits, cavies and small pets. Cannot tip over, and the saving in feed soon pays for them. See illustration.

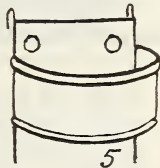
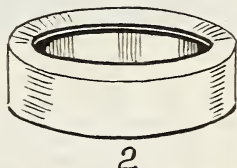
**No. 2.**—Earthenware, heavily glazed; the incurving top rim prevents the nosing out of feed. Will not tip over.  
Prices: 6-inch, 25c each, \$2.50 doz.; 8-inch, 30c each, doz. \$3.25. If wanted by parcel post, add 8c each or 50c doz. for safe packing and postage at 2 lbs. each.



Carlton, Oregon, July 20, 1918.  
Routledge Seed & Floral Co..  
Gentlemen: I received New Zealand Doe in good shape. She is all right. I remain,  
Yours sincerely,  
JOHN ROBERTSON.

Gifford, Idaho, Aug. 2, 1918.  
Routledge Seed & Floral Co..  
Dar Sirs: The Rabbits arrived Saturday evening, July 27, o. k. They are lovely pets.  
Yours truly,

HENRY STOLTE.



**No. 5.**—Heavy galvanized, half bowl shape, to hang on cage door or partition. Our new style, cannot drop or be knocked off. Each 30c, doz. \$3.25. Mailing wgt. 1 lb. each. Postage extra.

Don't Overlook Our Up-to-Date Rabbit Books on Next Page.

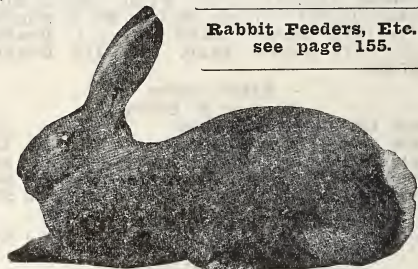


## RABBITS—BELGIAN HARES

We keep in stock at our store about 20 pens of Rabbits of different breeds and can bring in on short notice most any stock wanted in this line.

Rabbit meat is now a staple and recognized product in the Portland markets and the demand is becoming greater and greater. Rabbit meat is fine grained, tender, easily digested and equal in flavor and quality to chicken. France and Belgium have for years been producing and consuming millions of pounds of rabbit meat.

For cheapness of production, small amount of space, time and care required; the low cost of foods (especially on this coast where greens and root crops are so plentiful), the rabbit industry will surely come into its own. **Start now and make money.**



Rabbit Feeders, Etc.,  
see page 155.

### Flemish Giant Buck

**Note.**—By **Young Stock**, we mean from 2 to 3 months old; **Breeding Stock**, 6 months or over; **Fancy Stock**, high-bred pedigree stock, bred for size, shape and color, for special breeding or show purposes; **Utility Stock**, a pure-bred, good grade of healthy, vigorous stock for meat and general purposes.

### PRICE LIST

	Young 2 to 3 Mos.		Breeder's 6 Mos. or Over		Bred Does to Order
	Bucks	Does	Bucks	Does	
WHITE ENGLISH .....	\$ .75	\$1.00	\$3.00	\$4.00	\$5.00 & up
RUFUS RED BELGIANS.....	Utility 1.50	2.00	5.00	6.50	7.50 & up
	Fancy 2.50	3.50	10.00	12.50	15.00 & up
NEW ZEALAND REDS.....	Utility 1.50	2.00	5.00	6.50	7.50 & up
	Fancy 2.50	5.00	10.00	12.50	15.00 & up
FLEMISH GIANTS .....	Utility 2.50	3.00	7.50	10.00	12.50 & up
	Fancy 3.50	5.00	10.00	12.50	15.00 & up
HIMALAYANS .....	Fancy 3.00	4.00	7.50	10.00	12.50 & up

English Lop-Ear stock limited; write. Weights given are mature stock.

**Special Note.**—The cheapest and quickest results can be obtained by the beginner by buying one or more **Bred Does** and an extra Buck, not related. **Utility Buck service, 75c to \$1.50; Pedigreed, \$2.00 to \$5.00.**

**HIMALAYANS**—Fur bearing. Very attractive; body generally all white, with black nose, ears, feet and tail. The fur is heavy, fine and of recognized value. Weight, 6 to 8 lbs.

**FLEMISH GIANT—BELGIAN**—Very popular on account of their large size and quick growth, which makes them valuable for market. Color, light squirrel grey to solid black. Weight, 10 to 12½ lbs.

**WHITE ENGLISH**—Very popular pets with children as their white coats and pink eyes make them so attractive. Always in demand as Easter Rabbits.

**RUFUS RED BELGIANS**—Improved strain of the common Belgian Hare. Color, greyish red; coat fine and soft; weight, 8 to 9 lbs.

**NEW ZEALAND REDS**—A hardy, sturdy strain very popular and much in demand, meat fine in quality and flavor. Color, red. Weight, 8 to 10 lbs.

Corvallis, Oregon, June 22, 1918.  
Routledge Seed & Floral Co.,

Dear Sirs: I received my Rabbits on the 19th and they are sure fine ones. I am very much pleased with them.

Very truly yours,

GUS LEDER.

Filer, Idaho, July 18, 1918.  
Routledge Seed & Floral Co.,

Gentlemen: The Rabbit arrived o. k. and has far exceeded my expectations. He sure is a fine fellow, a good one. Please send me pedigree and oblige.

Yours truly,

C. E. GRIESER.

### NEW BOOKS ON RABBITS

Save time, energy and money by reading these practical and up-to-date books. Did you ever stop to think that a few hours' reading now and then will give you valuable information that it has taken others years of labor and experience to obtain?

**Gibson's New Rabbit Book.**—The latest and most complete information ever published about rabbits. Gibson is an international judge and secretary of the National Pet Stock Association. He has had twenty years' experience with all varieties. Over forty illustrations and full information on housing and hutches; proper handling and selection; breeding, feeding, selling, shipping and exhibition. This book covers all breeds and gives tested receipts for cooking and serving as food; fur proposition, etc. 1918 4th edition, 200 pages; 5x7, well printed on white book paper. **Price, paper cover, \$1.00; postpaid, \$1.10. Cloth cover, \$1.60.**

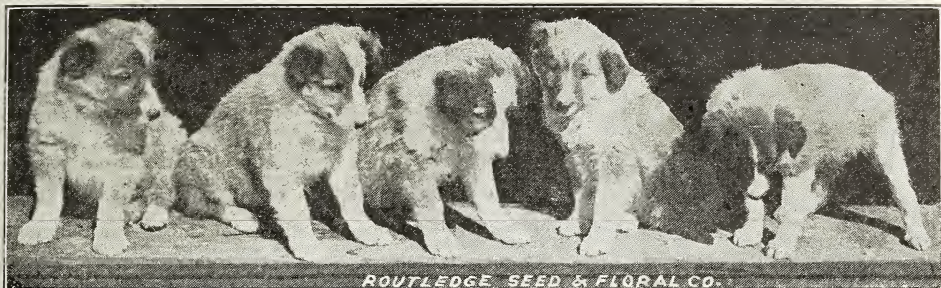
**Western Rabbit Book.**—Complete text book on the rabbit industry by C. A. Richey, Los Angeles, Calif. Well printed and nicely illustrated. Covers about the same subject as the above book but is not as complete in all departments. Very valuable for the beginner. Size 6x9 inches; 70 pages; paper cover. **Price, 50c; postpaid, 60c.**

**The Belgian Hare Guide.**—Valuable, instructive book, devoted to the care, feeding, breeding, housing and diseases of the Belgian Hare, complete and up-to-date. One chapter on Flemish Giants. Good value for the price. Size 6x9; 48 pages, illustrated; paper cover. **Price, 35c postpaid.**



## Puppies and Dogs

Buy your child a puppy and let them grow up together. Aside from the protection and companionship, educational experts advise that all children are better by having pets.



Some of our Farm-raised Scotch Collie Puppies

Most buyers prefer a pup so it can be raised and trained to suit, but occasionally someone wants a full grown dog; we sell both. Our largest demand is for Fox or Irish Terriers, Toy, Boston and English Bulls, Airedales, Spitz, Cocker Spaniels and Scotch Collies, but we can also supply Setters, Pointers and other breeds.

If out-of-town customers will write and tell us what they want—breed, color and sex and what stock, fancy, pedigreed or just good, fairly pure strain, we are sure we can please you and give you extra good value. The prices on the different breeds and stock range from as low as \$5.00 to \$50.00.

### Persian Angora Cats or Kittens

These long, fluffy, silky-haired pets are great favorites with the ladies, and with their bright intelligence, affectionate dispositions, cleanliness and beautiful appearance it is not to be wondered at. Aside from their value as pets there is good money in breeding and raising them. as they find quick sale. Most of the stock we offer is from pedigreed stock and eligible to registration. The popular colors are Orange, Silvers, Shaded Silvers,—Orange, Brown and Silver Tabbies,—White, Black, Blue and Tortoiseshell.

**RANGE OF PRICES.**—Young Kittens: Males, \$10 to \$20; Females, \$7.50 to \$15. Old, 6 months or over, prices on request.

**CATNIP MICE and CATNIP BALLS**, see page 158.

Eugene, Ore., Nov. 21, 1918.  
Routledge Seed & Floral Co.,  
Portland, Ore.

Dear Sirs: The Persian Kitten arrived here in excellent condition; the pedigree came today. I am very pleased with both. The Kitten is exactly what I wanted in color, etc. The Kitten has been very well trained, and is very intelligent. Thank you very much for your promptness.

Very truly yours,  
(Signed) ROBERT V. BRADSHAW.

Adams, Oregon, March 4, 1918.

Routledge Seed & Floral Co.,

Dear Sirs: The pup arrived in fine condition and we are very well pleased with him as he seems quite smart and is very bright and lively.

Yours very truly,  
W. L. MORRISSETTE.

## Cat, Dog and Rabbit Pedigree Blanks

We offer breeders, what we believe to be the prettiest and most up-to-date, properly constructed pedigree blanks. These are printed in two colors and beautifully illustrated.

**Prices.**—For Cats or Dogs, state which, 10c each; 6 for 50c; 12 for 85c.



Silver-shaded Persian Cat.

Blakelyville, Oregon, Jan. 2, 1918.  
Routledge Seed & Floral Co.,

Kind Sirs: The little Collis Puppy you sold to me is now a fine large fellow and I am highly pleased.

Yours truly,  
MRS. S. L. THOMPSON.

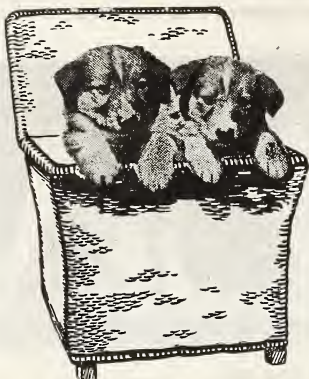
**NOTE.**—We would be very glad to hear from any reliable breeders of Dogs, Cats or Rabbits, when they have stock to sell. Give us full information, BREED, WHAT KIND OF STOCK, AGE, SEX and NET PRICE TO US.



## Maltoid Milk-Bone Dog and Puppy Food

A FOOD THAT ALL DOGS LOVE. MADE ON A NEW PRINCIPLE

Bone Shaped Dog and Puppy Biscuit



Remember, we sell Puppies  
of all kinds

The food of dogs not only must provide a certain amount of nourishment—it must also be **pure, wholesome** food. It must be not merely "filling" but **appetizing** as well.

For, as everyone knows, food affects dogs in precisely the same way it affects humans. Food eaten with enjoyment is much more easily digested than food of unattractive flavor.

So, we make Maltoid Milk-Bone on the same principles of purity and good flavor as human food. Hence it appeals to the dog's senses of smell and taste.

And we guarantee that **Maltoid Milk-Bone** contains only pure, wholesome foodstuffs, including good, clean meat, without sugar, spices or artificial flavoring of any kind.

Maltoid Milk-Bone is made to meet the particular physical needs of dogs: it is made to suit the peculiar digestive organism of dogs. Maltoid Milk-Bone not only provides the necessary energy-producing material, but it also supplies the materials for **tissue repair**.

If you want a happy, bright-eyed dog, full of life and ginger—whose skin is always healthy and coat always glossy, a dog with bright, clear eyes, sweet breath and regular habits, feed Maltoid Milk-Bone.

**Prices.**—Add postage if wanted by mail.

**Milk-Bone Puppy Biscuit**, 2½ lb. pkgs., 45c.

**Milk-Bone Dog Biscuit**, 2½ lb. pkgs., 45c.



## Here You Are—Don't Forget "Kitty" or "Tom"

Most every home has a cat and every cat should have a plaything. **Catnip Mice** and **Catnip Balls** are just the thing, make the cats playful, healthy and wide awake—they love the smell of catnip and crave it, a little occasionally to keep in good health is almost necessary.

### CATNIP MICE

Made of cloth, same size, shape and color of a real mouse, and stuffed with dried catnip leaves. Kitty will play for hours with this mouse and then should be given a little catnip. Price, 15c; postpaid, 20c.

**SPECIAL.**—1 Catnip Ball, 1 Catnip Mouse and 1 pkg. Catnip, postpaid, for 50c.

### CATNIP BALLS

These are hollow wooden 1½-inch red balls, filled with catnip. It's great sport for the cat to roll them around. A wonderful toy for cats. Price, 15c; postpaid, 20c.

### CATNIP LEAVES

Catnip leaves, properly cured and dried. Always keep a package on hand to treat Kitty with. Price, 15c; postpaid, 20c.

## Spratt's Cat Food and Remedies

**Spratt's Cat Food.**—A complete food for cats. Used at the leading cateries throughout the world and daily becoming more popular among the fancy. **Small pkg.** (P. P. 1 lb.), 25c; **large pkg.** (P. P. 2¾ lbs.), price 45c. Add postage.

The above is also prepared with **Pasteurized Milk**, excellent for kittens and invalid cats, or prepared with **Fish** to be used as a change of diet, especially during the summer months. Prices same as the regular Cat Food above.

**Vermifuge Capsules for Cats.** Postpaid 50c  
**Distemper Tablets for Cats.** Postpaid 75c  
**Tonic and Condition Tablets for cats.** Postpaid 50c.

**Malted Kitten Food.**—Use tablespoonful to pint of hot water; very valuable and inexpensive. **Can, 45c; postpaid 50c.**

**CAT COMBS.**—We sell Spratt's nickled cat combs. **No. 8**, \$1.25; **No. 0**, \$1.35; **No. 7**, Double, \$1.50; **6A**, \$1.75.

**CAT BOOKS.**—**Cat Culture**, Spratt's, 15c; **Domestic and Fancy Cats**, by Jennings, covers all subjects, 55c postpaid.

**NOTE.**—Cat owners are feeding **Fibo**, **Pep-sinated Meal**, **Midget**, **Puppy** and **Cod Liver Oil Biscuits** with the greatest success.



## Spratt's Dog, Puppy and Cat Foods, Remedies, Etc.

Known and used the world over. None better. We have hundreds of customers and now buy in carload lots. Prices subject to market changes. Spratt's descriptive Dog Book and Catalog free.

### Spratt's Dog Foods

**NOTE**—Carton wgt.s. are wrapped for mailing. **ADD POSTAGE** on all sizes if wanted by parcel post.

**SPRATT'S DOG CAKES.**—A properly balanced meat, grain meal and vegetable compound that will not spoil with age. Known and recommended the world over as a complete and constant food for dogs. Most owners of dogs rely on scraps from the table as "dog feed." This is all right as far as it goes, but to be on the safe side and for vacation trips, etc., always keep a supply of Dog Cakes on hand.

**PRICES:** (Whole), 2½-lb. cartons, 45c; 5-lb. bags, 80c; 10-lb. bags, \$1.50; 25-lb. bags, \$3.25; 50-lb. bags, \$6.35; 100-lb. bags, \$12.60. (Packed in boxes ½c lb. extra.)

**DOG CAKES (Kibbled).**—Nut size.—2½-lb. carton, 45c; 5-lb. bags, 80c; 10-lb. bags, \$1.50; 25-lb. bags, \$3.25; 50-lb. bags, \$6.35; 100-lb. bags, \$12.60.

**COD-LIVER OIL BISCUITS** are invaluable for old or delicate dogs or those recovering from sickness. Dogs eat them without coaxing.

**Prices:** 2½-lb. cartons, 45c; 5-lb. bags, 90c; 10-lb. bags, \$1.75; 25-lb. bags, \$3.45; 50-lb. bags, \$6.85; 100-lb. bags, \$13.60. (Packed in boxes ½c lb. extra.)

**FIBO, for Puppies or Growing Dogs.**—For shy feeders or those recovering from sickness, or as a change of food at any time for all dogs. Small nut size.

**Prices:** 2½-lb. cartons, 45c; 5-lb. bags, \$1.05; 10-lb. bags, \$2.05; 25-lb. bags, \$4.20; 50-lb. bags, \$8.30; 100-lb. bags, \$16.50.

**"MIDGET" CHARCOAL BISCUIT.**—To correct all bowel troubles, weak digestion, fetid breath, etc. All dogs should have at least once a week, and preferably at regular intervals, a meal of these excellent cakes. 2½-lb. cartons, 45c.

**BULLDOG AND TERRIER MEAL.**—A conditioner. Makes bone and muscle. 2½-lb. cartons, 45c.

### Spratt's Puppy Foods

A perfect and whole food for puppies of all breeds. Puppies should be started on these biscuits when about one month old, and they should be continued until such time as their teeth become sound and strong, usually when they are about six months old.

**PUPPY BISCUIT.**—2½-lb. cartons, 45c; 5-lb. bags, 85c; 10-lb. bags, \$1.60; 25-lb. bags, \$3.40; 50-lb. bags, \$6.70; 100-lb. bags, \$13.25. (Packed in boxes ½c lb. extra.)

**PLAIN PUPPY MEAL.**—The standard weaning food. This Meal should be used before, during, and after the weaning period to insure large, vigorous, and healthy puppies. Also an invaluable food for dogs of any age out of condition. 2½-lb. cartons, 45c.

**PEPSINATED PUPPY MEAL** for delicate puppies. To be used in place of our Plain Puppy Meal for puppies of weak digestion. Contains the requisite proportion of pepsin to render it an easily assimilated food for "bad doers." 1½-lb. cans, 50c.

**SPRATT'S DOG CULTURE.**—New edition, 48 pages, contains valuable information on the care, management, breeding, rearing and feeding. Also tells all about Spratt's Food, Remedies and Supplies. **FREE UPON REQUEST.**



**ORPHAN PUPPY FOOD.**—Substitute for Natural Milk. For use when mother is dead or deficient in milk. Puppies should be fed on this food until weaning time. 1½-lb. can, 60c.

**BONE MEAL FOR PUPPIES.**—The strong frame builder. Specially prepared in a state to most readily supply the constituents needed to assist in building up a strong frame and preventing rickets, large joints, etc. 3-lb. tin can, 40c.

**MIDGET BISCUITS.**—A small biscuit of superior quality, containing a lesser percentage of meat fibrine than the ordinary cake. About 30 to the pound. Excellent for puppies, toy dogs and cats. 2½-lb. carton, 45c; postage extra

**"SPRATT'S" MOLLICODDLES (Milk-Wheat-Meat).**—For dainty feeders, puppies, for toys. These biscuits satisfy the jaded palate, restore the failing appetite and **AT THE SAME TIME** provide a sound and wholesome food. 2½-lb carton 45c.

### Spratt's Remedies and Medicines

**DOG SOAP (White).**—Kills lice and fleas, prevents skin diseases and leaves the coat smooth and glossy, contains no tar, nicely perfumed. Per cake 25c; postpaid 30c.

**Antiseptic Soap (Black).**—For cuts, wounds, ulcers, etc., disinfectant and germicide. Cake 50c.

**Chronic Skin Disease Tablets.** Postpaid 50c.

**Alternative Cooling Tablets.**—For heated blood, etc. Postpaid 50c.

**Digestive Tablets.**—For severe cases of indigestion. Postpaid 50c.

**Diarrhoea Tablets.**—To relieve diarrhoea. Postpaid 50c.

**Distemper Tablets.**—For toy dogs and puppies. Postpaid 75c.

**Ear Canker Ointment.**—Postpaid 50c.

**Eye Lotion (tablet form)**—Postpaid 50c.

**Eczema Remedy.**—Postpaid 50c.

**Hair Stimulant and Restorer.**—Postpaid 50c.

**Purgative Tablets.**—Perfectly safe and effective. Postpaid 50c.

**Tonic and Condition Tablets.**—For toy dogs and puppies. Postpaid 50c.

**Worm Capsules.**—An excellent remedy for Round, Maw and Tape Worms. Postpaid 50c.

**Worm Capsules for Puppies.**—May be given with perfect safety. For dogs, for puppies. Postpaid 50c.

**Vermifuge Capsules.**—For toy dogs and puppies. Postpaid 50c.

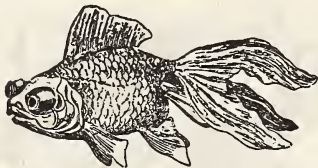
**Mange Remedy.**—Pints 50c; prepaid 65c.

**DOG WASH.** Disinfectant and deodorizer. Read about Conkey's Noxicide, page 149.



## GOLDFISH, GLOBES, FOOD, ETC.

We are the largest retail and wholesale dealers in Fancy Gold Fish in the Northwest, often having a thousand or more on display in our large aquarium at our store.



Chinese Telescope



Common Gold Fish



Japanese Fan-tail

An aquarium is a beautiful ornament. It suits everywhere—parlor, library, dining and sitting-room, and may indeed be introduced in apartments of the sick. The bright, active Gold Fish are very interesting, a perpetual source of amusement for both old and young folks. Children are always delighted with them.

**CARE OF GOLD FISH.**—The care of Gold Fish is very simple and little trouble. The water in the aquaria must be changed from one to six times a week, depending on the size of the globe, the number of fish and the temperature. When the fish come to surface and gasp for air, they should be given fresh water.

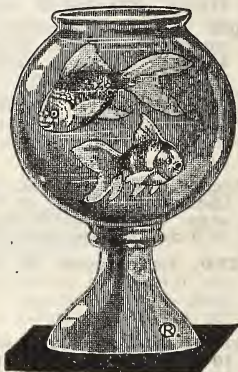
**FEEDING.**—The only safe diet is our prepared Fish-Food, fed daily and only what they will eat up quickly. Bread or cracker crumbs should never be fed. More fish die from over-feeding than from any other cause. Keep the aquariums out of the direct hot sunlight and in a cool place.

### PRICE LIST OF FISH

**COMMON GOLD FISH** (see cut).—Very hardy and lively. Each, very small, 15c; small, 25c; medium, 35c; medium large, 50c; large, 3 to 4 inches, 75c; extra large, \$1.00; extra large breeders, \$2.00 to \$3.00; fancy tri-colored, 35c to \$1.00 and up.

**COMMON SILVER FISH.**—Same as above, except they are silvery white. Each, medium, 25c; large, 50c to 75c and up to \$1.50.

**JAPANESE FAN-TAIL** (see cut).—The most popular fancy fish. The fins and tail are of a delicate lace-like appearance, very showy and attractive. Price, golden, small, 35c; medium, 40c to 50c; large, 75c to \$1.00 and up to \$3.00; tri-colored, golden-red, pearly-white and black, showing two or all three colors, 50c, 75c and \$1.00 each.



Standard Globe

**COMET.**—Very fancy; the most graceful of all. Similar to the Japanese Fan-tail, but the fins and tail are much longer and delicate. The tail is often longer than the fish. Price each, 50c, 60c, 75c, \$1.00 and \$1.50.

**CHINESE TELESCOPE** (see cut).—Curious and attractive on account of the large, elongated eyes, having the appearance of a telescope. Flowing double tails. Very rare. Price each, 75c to \$1.50.

**TADPOLES.**—Desirable as scavengers for the aquaria. They consume the decaying matter and help keep the water pure. Price each, 15c.

### FISH FOOD

Best rice wafer, large box, enough food for four fish for six months. 25c, postpaid. Directions for feeding and care on each box.

### SPRATT'S FISH FOOD

A baked food that is reground to pin head size. Fish are very fond of it. Per can, 15c; postpaid, 20c.

### AQUARIA PLANT OR FISH MOSS

This water plant improves the appearance of the aquaria or globe and helps purify the water, also keeps the water fresh longer. Price per bunch, 25c, postpaid. Cannot supply in July or August.

**NOTE.**—ALL SHIPMENTS (outside of the city) must go by express. A charge of 25c is made to cover cost of Shipping Bucket, holding from two to eight fish. Gold Fish can be shipped safely overland hundreds of miles. They cannot be sent by mail.

### FISH GLOBES

Stock very scarce and prices subject to change. Cannot be sent by mail.

Without foot or base, each quart, 60c; ½-gal. \$1.00; ¾-gal. \$1.25; 1-gal. \$1.50; 1½-gal. \$1.75; 2-gal. \$2.25; 2½-gal. \$2.75; 3-gal. \$3.50.

### STANDARD GLOBES

Cannot be sent by mail.

Like illustration, each, ½-gal. \$1.50; ¾-gal. \$1.75; 1-gal. \$2.00; 1½-gal. \$2.25; 2-gal. \$2.50; 2½-gal. \$3.00; 3-gal. \$3.50.

### AQUARIA CASTLES

As ornaments to set in the globes. Prices, 25c to 50c and up to \$1.00 each. No. 4, 25c; No. 6, 35c; No. 8, 40c; postage 5c extra.

**WHEN?** We have the largest supply of Gold Fish on hand during the FALL, WINTER and EARLY SPRING. It is not safe to ship fish during the hot summer months.



Order Sheet **Routledge**  
**SEED & FLORAL CO.**

Rate

**145 147 2<sup>nd</sup> St. PORTLAND ORE.**

In filling this order we will use the greatest care to have it true to name, and will replace any that may prove untrue. But no sale by us carries a warranty of quality, express or implied, and for any error we shall not be liable for more than the purchase price. Every purchase from us is made on these terms.

ROUTLEDGE SEED & FLORAL CO.

ROUTLEDGE SEED & FLORAL CO.

NAME \_\_\_\_\_

DO NOT USE  
THESE SPACES

POST OFFICE \_\_\_\_\_ R. F. D. NO. \_\_\_\_\_

No. \_\_\_\_\_

STATION \_\_\_\_\_  
(If different from P. O.) \_\_\_\_\_

Amt. \_\_\_\_\_

COUNTY \_\_\_\_\_ STATE \_\_\_\_\_

Re. \_\_\_\_\_

DATE \_\_\_\_\_ AMOUNT ENCLOSED. \$ \_\_\_\_\_

**Ack.** \_\_\_\_\_

FORWARD BY \_\_\_\_\_  
State if wanted by Mail, Express, Freight or Steamer.  
(Read Note on bottom of this page.)

O. K. by \_\_\_\_\_

Card Made \_\_\_\_\_

[illegible]

Amount Carried Forward

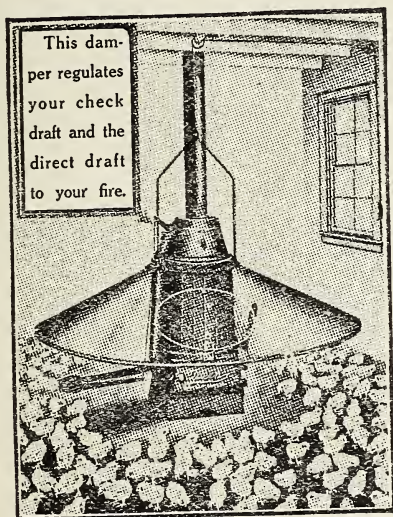
**NOTE.**—Before you send this order read carefully what we have to say about parcel post and transportation charges on inside front cover and on page 2.







# Queen colony brooders



YOU NEED  
THIS BROODER TO  
RAISE YOUR CHIX  
SUCCESSFULLY

THIS LETTER IS FROM

NAME.....

P. O.....

STREET.....

STATE..... R. R. No.....

PLEASE WRITE YOUR NAME AND ADDRESS ON ABOVE LINES.

ROUTLEDGE SEED & FLORAL CO.

PORTLAND,

NO. 145 AND 147 SECOND ST.  
BETWEEN MORRISON AND ALDER

ORE.



## QUEEN COLONY BROODER SPECIFICATIONS

Cast iron stove throughout. Galvanized steel hover made in sections. Easy to set up or take down. Tandem-hitched wafer thermostats very sensitive to changes in temperature. Rocker grates - best made. Check draft automatically regulates temperature under hover. Absolutely gas proof, fire proof, and will last for years.

QUEEN COLONY BROODER No. 1  
Capacity - up to 600 chicks.....\$21.00

QUEEN COLONY BROODER No. 2  
Capacity - up to 1200 chicks....\$24.50



For sale by

**ROUTLEDGE SEED &  
FLORAL CO.**

145 2nd St.

Portland, Oregon.

## "HIGHEST QUALITY" SEEDS

BIRDS

GARDEN

SUPPLIES

TREES

ROSES

PLANTS

**BIRDS**

PET STOCK

FERTILIZERS

POULTRY SUPPLIES

SPRAYS AND SPRAY PUMPS

## REFERENCE TABLES

Quantity of Seeds to produce a given number of plants or to sow an acre  
We have carefully revised and lowered the following amounts so that you will NOT  
PLANT TOO MUCH and thereby WASTE seed while they are HIGH AND SCARCE.

### Vegetable Seeds

	Per Acre		Per Acre
Asparagus—1 oz. to 200 plants....	3 lbs.	Kohl-Rabi—1 oz. to 300 ft. drill.....	2 lbs.
Beans, Dwarf—1 lb. to 125 ft. drill.	40 lbs.	Leek—1 oz. to 100 ft. drill.....	3 lbs.
Pole—1 lb. to 150 ft. drill.....	35 lbs.	Lettuce—1 oz. to 200 ft. drill.....	3 lbs.
Pole—1 lb. to 200 hill.....	25 lbs.	Melon, Musk—1 oz. to 50 hills.....	2 lbs.
Field—1 lb. to 200 ft. drill.....	30 lbs.	Water—1 oz. to 35 hills.....	2 lbs.
Lima—1 lb. to 75 hills.....	40 lbs.	Okra—1 oz. to 100 ft. drill.....	5 lbs.
Beet, Table—1 oz. to 60 ft. drill.....	6 lbs.	Onion Seed—1 oz. to 200 ft. drill....	3 lbs.
Mangel—1 oz. to 75 ft. drill.....	5 lbs.	For Sets.....	50 lbs.
Broccoli—1 oz. to 3,000 plants.....	3 ozs.	Onion Sets—1 lb. to 35 ft. drill.....	200 lbs.
Brussel Sprouts—1 oz. to 3,000 P.	3 ozs.	Parasnips—1 oz. to 300 ft. drill....	3 lbs.
Cabbage—1 oz. to 3,000 plants.....	3 ozs.	Parsley—1 oz. to 350 ft. drill.....	2 lbs.
Carrot—1 oz. to 150 ft. drill.....	2½ lbs.	Peas, Dwarf—1 lb. to 125 ft. drill.	80 lbs.
Cauliflower—1 oz. to 4,000 plants..	3 ozs.	Tall—1 lb. to 150 ft. drill.....	60 lbs.
Celery—1 oz. to 5,000 plants.....	3 ozs.	Pepper—1 oz. to 2,000 plants.....	4 ozs.
Chicory—1 oz. to 100 ft. drill.....	4 lbs.	Potatoes.....	600 to 700 lbs.
Corn, Sweet—1 lb. to 150 ft. drill....	18 lbs.	Pumpkin—1 oz. to 35 hills.....	3 lbs.
Sweet—1 lb. to 160 hills.....	15 lbs.	Radish—1 oz. to 100 ft. drill.....	10 lbs.
Corn Salad—1 oz. to 50 ft. drill....	5 lbs.	Rutabaga—1 oz. to 250 ft. drill.....	2 lbs.
Cress—1 oz. to 40 ft. drill.....	1 lb.	Salify—1 oz. to 100 ft. drill.....	8 lbs.
Cucumber—1 oz. to 50 hills.....	2 lbs.	Spinach—1 oz. to 100 ft. drill.....	10 lbs.
Egg Plant—1 oz. to 3,000 plants....	4 ozs.	Squash, Summer—1 oz. to 50 hills..	2 lbs.
Endive—1 oz. to 300 ft. drill.....	4 lbs.	Winter—1 oz. to 35 hills.....	3 lbs.
Horseradish Roots.....	10 to 15 M.	Tomatoes—1 oz. to 3,000 plants.....	3 ozs.
Kale, Table—1 oz. to 3,000 plants....	1 lb.	Tobacco—1 oz. to 4,000 plants.....	
Stock—1 oz. to 300 ft. drill.....	3 lbs.	Turnips—1 oz. to 250 ft. drill.....	2 lbs.

### Field, Farm, Grass and Clover Seeds

	Quantity per Acre		Quantity per Acre
Alfalfa.....	12 to 25 lbs.	Rye Grass—for Pasture.....	30 lbs.
Artichokes.....	400 to 600 lbs.	Rye Grass—for Lawn.....	100 lbs.
Barley—drills.....	75 lbs. broadcast 100 lbs.	Sudan—drills.....	3 to 5 lbs.
Buckwheat—drills.....	30 lbs. broadcast 50 lbs.	Broadcast.....	16 to 20 lbs.
Cheat.....	100 lbs.	Kaffir Corn—drills.....	6 to 10 lbs.
Clover—Alsike and White.....	6 to 10 lbs.	Millet—for Seed.....	20 lbs.
White for lawn.....	1 lb. to 25 ft. square	For Hay.....	30 lbs.
Crimson.....	10 to 15 lbs.	Oats—for Seed.....	65 to 80 lbs.
Red.....	8 to 15 lbs.	For Hay.....	100 lbs.
Sweet.....	15 to 20 lbs.	Peas, Field—100 lbs. or 80 lbs. with 35 lbs. Oats	
Corn, Field—hills.....	15 lbs.	Rape—drills 3 lbs. broadcast.....	5 lbs.
For Fodder, drills.....	50 lbs.	Rye—for Grain.....	60 to 80 lbs.
Grass, Kentucky Blue—Pasture.....	20 to 30 lbs.	For Hay.....	100 to 120 lbs.
Kentucky Blue—for Lawns.....	100 lbs.	Speltz or Emmex.....	80 lbs.
Mixed Lawn.....	1 lb. to 15 ft. square	Sugar Cane.....	10 to 12 lbs.
Red Top—Common.....	25 to 30 lbs.	Sunflower.....	8 to 7 lbs.
Red Top—Hulled, Solid Seed.....	10 to 15 lbs.	Timothy.....	12 to 15 lbs.
Orchard.....	25 to 30 lbs.	Vetches—85 lbs. or 60 lbs. with 40 lbs. Grain	
Brome Grass.....	25 to 30 lbs.	Vetch, Hairy or Sand.....	30 lbs.
		Wheat.....	80 to 100 lbs.

### Suitable Distance for Planting Trees and Plants

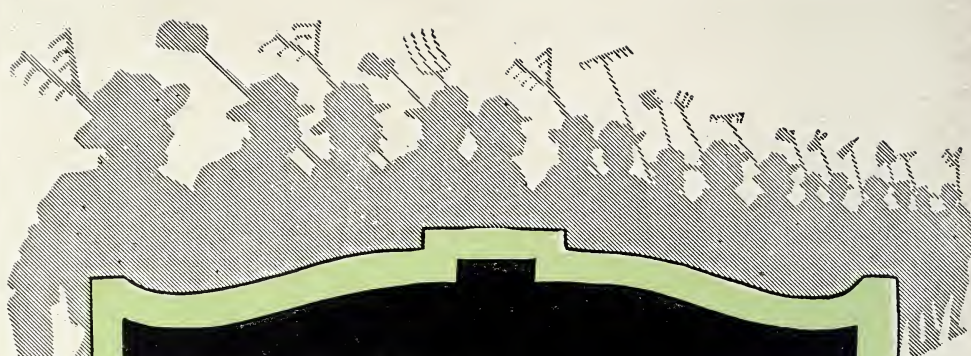
<b>Note.</b> —In planting in the home garden for hand cultivation you can set plants or trees closer.			
Apples, Standard.....	20 to 30 feet	Currants.....	4 by 4 feet
Apples, Dwarf.....	10 to 12 feet	Gooseberries.....	4 by 4 feet
Pears, Standard.....	18 to 20 feet	Raspberries.....	3 by 6 feet
Pears, Dwarf.....	10 feet	Trailing Berries, Logans, etc.....	6 by 8 feet
Peaches and Apricots.....	16 to 18 feet	Other Blackberries.....	2½ by 6 feet
Cherries, Sweet.....	20 to 25 feet	Strawberries, in Hills.....	1½ by 2½ feet
Cherries, Sour.....	16 to 20 feet	Strawberries, Matted Rows.....	2½ by 4 feet
Plums and Prunes.....	16 to 20 feet	Asparagus, in Beds.....	1 by 1½ feet
Quinces.....	10 to 12 feet	Asparagus, in Field.....	1 by 4 feet
Grapes.....	5 by 12 feet	Rhubarb.....	2 by 4 feet

### Number of Trees or Plants On An Acre

1 by 2 feet.....	21,784	3 by 5 feet.....	2,904	12 by 12 feet.....	802
1 by 3 feet.....	14,520	3 by 6 feet.....	2,420	15 by 15 feet.....	194
1 by 4 feet.....	10,890	4 by 4 feet.....	2,723	16 by 16 feet.....	170
1½ by 2 feet.....	14,520	4 by 6 feet.....	1,815	18 by 18 feet.....	135
1½ by 3 feet.....	9,852	6 by 8 feet.....	907	20 by 20 feet.....	110
2 by 3 feet.....	7,261	6 by 6 feet.....	1,210	25 by 25 feet.....	70
2 by 4 feet.....	5,446	8 by 8 feet.....	630	30 by 30 feet.....	45
3 by 4 feet.....	3,630	10 by 10 feet.....	430	40 by 40 feet.....	28

**RULE.**—Multiply the distance in feet between the rows by the distance the plants are apart in the rows, and the product will be the number of square feet, for each plant or hill, which, divided into the number of square feet in an acre (43,569), will give the number of plants to the acre.





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